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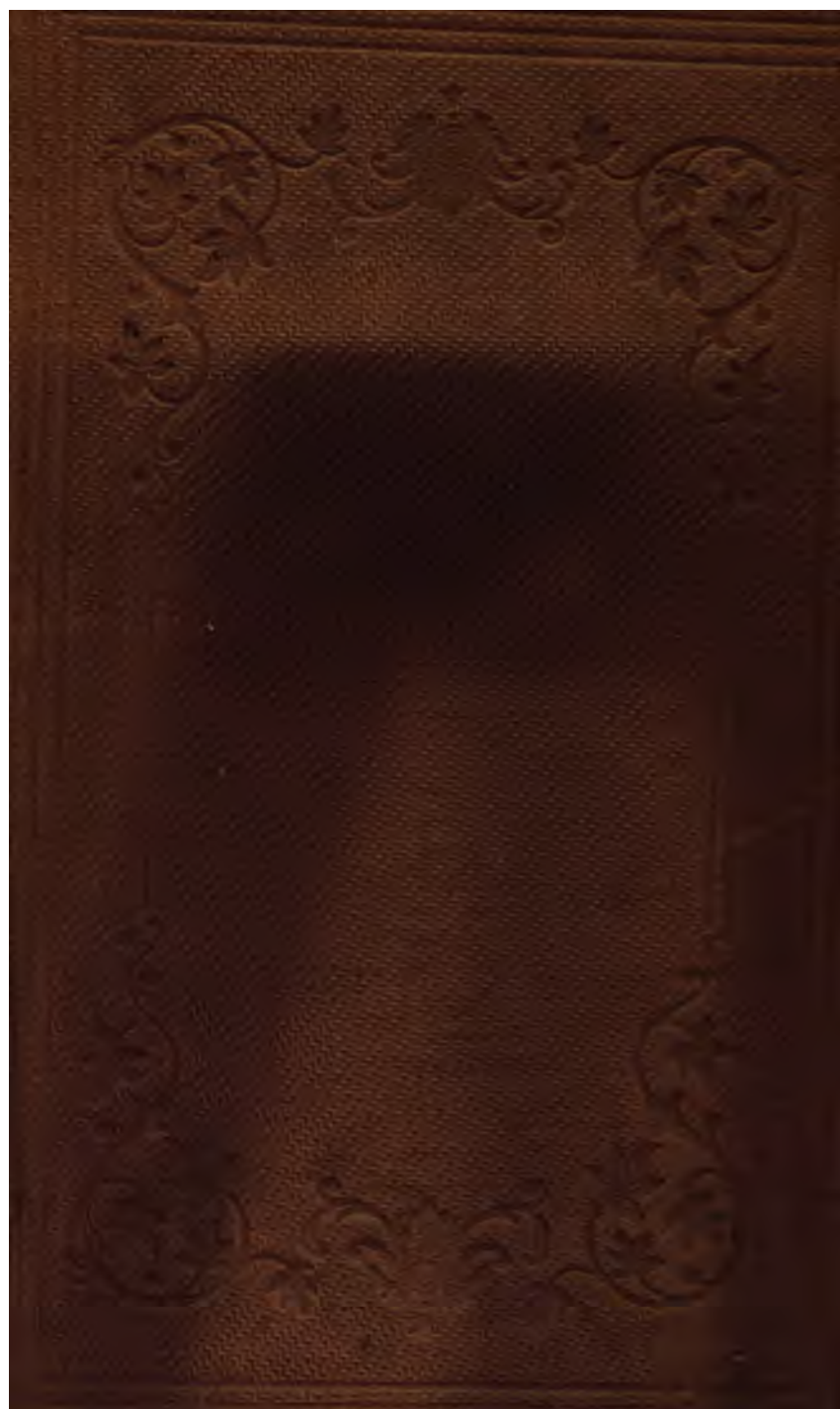
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HARVARD COLLEGE

THE GIFT OF

GEORGE ARTHUR P

LATIN PRONUNCIATION
AND THE
LATIN ALPHABET.

BY
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OF PHILADELPHIA.
AND
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INTRODUCTION.

WITHIN the last twenty or thirty years great progress has been made in the dominion of language, as well as in all the departments of the arts and sciences. Before this time, the classical languages were a separate branch of study and of learned investigation, but by the efforts of *Prof. F. Bopp* and his school, they are now acknowledged to be members of one large family, the organic forms of which mutually supply and explain each other. Most idioms of Italy, even, are shown to be members of one common stock, by the important labors of *Aufrecht*, *Kirchhoff*, *Mommsen*, and other learned men; and the Latin itself, far from being any longer regarded as a mere mongrel composition of Greek and barbarian elements, is now universally admitted, by the learned, to be of the same independent growth among the other Italic dialects, as the Hebrew among the Semitic. Highly important results, moreover, have been attained by the critical examination of Latin texts made by *Ritschl*, *Lachmann*, *Fleckeisen*, and others, while floods of light have been shed on the whole history of the development of the Latin language, by the investigations of *Diez*, *Fuchs*, and other philologists, who, starting with the Latin in the latest stages of its existence, have traced from it the beginnings of the modern Romance tongues. Yet, with all

this mass of new information, as our oldest Latin manuscripts were mere amended copies, dating from the times after Christ, many questions concerning the original orthography and pronunciation of the Latin remained still unsettled. New means were therefore devised by our scholars to supply these deficiencies. A great number of inscriptions were collected, from the early times of the republic to the latest times of the empire, and, by subjecting them to a most minute analysis, and comparing them with each other, they were made to yield up the desired information. This was done in monographs by Ritschl, and others. The final work, however, of reducing these manifold results into one harmonious whole, and of solving, by their means, the problem of the pronunciation of the Latin among the Romans, was accomplished in a most satisfactory and skilful manner by *Prof. W. Corssen*, in a prize-essay, "*On the Pronunciation, Vowel-system, and Accentuation of the Latin Language*,"* which was crowned by the Academy of Sciences in Berlin.

Our object, in these pages has been to review this important work at full length, and, at the same time, to give to the English students who have no access to the original work, a clear and succinct statement of all the results at which Mr. Corssen has arrived, so far as they have reference to the language itself, and excluding the part on quantity. At the close of our work, we institute a comparison between the Latin language, as pronounced by the Romans themselves, and our Latin scholars in America and Great Britain.

* *Ueber Aussprache, Vokalismus und Betonung der lateinischen Sprache. Von der königlichen Akademie der Wissenschaften zu Berlin gekrönte Preisschrift von W. Corssen. Zwei Bände. Leipzig, Druck und Verlag von Teubner. 1858.*

LATIN ALPHABET.*

All Italic alphabets according to Mr. CORSSSEN, with the exception of the Latin, appear to have taken their origin from an older Greek alphabet, in which there were two characters for the sibilant "s," viz: Σ , the Phenician *Shin*, and the Doric *San*, and \mathbf{M} , the Phenician *Samech* and Ionic *Sigma*, but where of the marks of the guttural smooth, viz.: *Kappa* and *Koppa* \mathbf{K} and \mathbf{Q} , the latter had been lost.

Among the alphabets, descended from this Greek alphabet, we find *first* the *Sabellian*. The two principal inscriptions of this idiom, viz., on the stones of *Crecchio* and *Cupra* are written in a sort of serpentine line, uninterruptedly continued. This mode of writing is older than the usual Boustrophedon, and is only found in old Corcyrian and Peloponnesian inscriptions. In these two inscriptions, the vowels O and V (u) are distinguished, which distinction has been lost in other Italic alphabets and dialects.

[From the fact, that only one sign was used in the other Italic alphabets for the representation of the vowels o and u, viz., V, it does not follow that the former was also wanting in the pronunciation; as is illustrated by the Arabic, where they have one single character for the representation of these

* N. B. The substance of the following pages, where not expressly stated otherwise, is entirely derived from Prof. Corssen's work; our own additions we either distinctly state to be such, or else we enclose them in brackets, [].

two sounds. Or, supposing that the vowel *o* was really wanting in the pronunciation of these dialects, Mr. Corssen's assertion that it had previously existed therein, but was subsequently lost, is entirely unwarrantable; for it is more probable that it did not exist therein originally, but was afterwards developed from *u*.] In the Sabellian alphabet, however, we find the two characters for the sibilant "*s*," viz. : Σ and \mathcal{M} .

Secondly, the *North-Etruscan Alphabets*, which have lately been discovered north of the Apennine, beyond the proper boundaries of the Etruscan language, as far as the Alpine valleys of Tessin, Tyrol, Provence, Grisons and Styria. Of these inscriptions some are written in a serpentine line, others in the usual Boustrophedon, running from right to left, and backward from left to right. All of these alphabets have the characters Σ and \mathcal{M} for the sibilants, some few have both vowel-signs \bigcirc and ∇ , and others only \bigcirc or ∇ . Very nearly related to these North-Etruscan alphabets is *thirdly*, the *Etruscan alphabet proper*, which has originated immediately from the Greek alphabet and the syllabariums, found in the graves of *Caere* and *Colle*, near Siena. This alphabet exhibits the twenty-two Old-Phenician letters, and the four letters which had been invented, at an early time, in Greece, viz. : *v*, *ξ*, *φ*, *χ*. It has both marks of the sibilant \mathcal{M} (for *M*) and Σ , but not the letter Φ . From this has been copied, *fourthly*, the *Etruscan alphabet of Bomarzo*, which has adopted nineteen letters of the alphabet of Caere, and among them both signs of the sibilant \mathcal{M} and Σ , to which it has added the character θ for the consonant-sound *f*, which is peculiar to the Italic languages. Since the forms of the letters in these two alphabets perfectly harmonize with each other, since there are none of those discrepancies between them which are found between the various Greek alphabets, and since neither of them know the Greek Φ but have the signs \mathcal{M} and Σ , Mr. Corssen says, that the fact, that the above Greek alphabet was found in two Etruscan graves, is a

sufficient proof that the Etruscan alphabet of Bomarzo has been imitated from the Greek one of Cacre, (Mommsen, *Unteritalische Dialecte*, pag. 9-21.) From this Old-Etruscan alphabet were produced, in the course of time, after the sign of the vowel O had disappeared from it, *fifthly*, the *Campano-Etruscan alphabet*, *sixthly*, the *Oscan*, and *seventhly*, the *Umbrian*. All of these have retained the mode of writing from right to left, but have *lost* the sign **O**, like the more recent Etruscan alphabet. The Oscan alphabet, of the two characters for the sibilant S, has only preserved **≥**, like the Latin.

The Latin language has adopted another, more recent alphabet, which had come from Greece into Italy, viz.: the Doric of the Cuman and Sicilian Greeks. This alphabet has preserved both marks for the guttural smooth, viz.: *Kappa* and *Koppa*, **K** and **Q**, but it has given up the sign **M** of the sibilant letter in favor of **s**, and instead of the old form of **r**, viz.: **P**, **Δ**, **P**, it has adopted a later form **R**, **P**, by which it is distinguished from all the other alphabets of Italy. The fact that this alphabet has been written, from the most ancient times, from left to right, that it has preserved the Old-Phenician letter **Q**, that it has abandoned the character **M** in favor of **s**, moreover that it used the sign **F**, instead of the Etruscan sign **S**, for the Italic consonant **f**, and has adopted a new sign for the letter **r**, proves sufficiently, according to Mr. Corssen, that the Latin alphabet has not descended from the Etruscan, but from the more recent one of Cumae, with which Rome, during the time of the Tarquinii, was intimately connected. Of the twenty-four letters of this Greek alphabet the Latin has cancelled the three aspirates **Θ**=**θ**, **Φ**=**φ**, **Χ**=**χ**, because these sounds were not in the language, and in order to express the Italic consonant **f**, it used the character **F**. The Latin alphabet, in the most ancient inscriptions, thus consists of the following twenty-one letters:

1. a. A, Ȧ, Ȧ, Ȧ.	11. l. L, Ⱥ, L.
2. b. B, B.	12. m. M, W, MW, IIII.
3. c. C, C, C.	13. n. N, N.
4. d. D.	14. o. O, O, O, o.
5. e. E, II.	15. p. P, P.
6. f. F, F.	16. q. Q.
7. z. Z.	17. r. R, R.
8. h. H.	18. s. S, S, S.
9. i. I.	19. t. T, T.
10. k. K. (E)	20. v, (u). V.
	21. x. X.

The fact that the letter Z was part of this old alphabet, is proved by its appearance in the *Carmen Saliare* (Vel. Long. p. 2217. P.) and in a fragment in Varro. The letter X also belonged to it, since it is found in the oldest monuments which we possess. According to Priscian it was nevertheless adopted at a little later period, and therefore was placed at the end of the alphabet of that time. The oldest document in which it is found is the "*Senatusconsultum de Bacchanalibus*," 186 before Christ. Nigidius Figulus, the learned contemporary of Varro, objected to its use, and the latter, also, was not willing to acknowledge it as an independent letter. According to Mr. Corssen, the letter *x* was introduced in the time intervening between the legislature of the Decemviri and the downfall of Veji. After the time of the Gracchi *xs* was also written instead, and even in inscriptions, as late as the time of the empire, we occasionally find it spelled '*cs*,' (*ucsori, lucserunt, bicsit*); and the character *x* itself is held by some to be an amalgamation of an inverted *c* and *s*, viz. : *cs*. The Umbrians and Oscans, also, invariably wrote *ks* instead of *x*, see Mommsen, p. 31.

As regards the sound represented by *c*, it does, indeed, occupy the place of the Greek Gamma, in the alphabet; thus of the guttural middle; but from the time, when our inscriptions begin, to the time of the first Punic war, it is also used for the guttural smooth, whose sign K had become obsolete.

If Mr. Corssen, (together with Mr. Mommsen, see "Unteritalische Dialecte," page 31 and 32,) from the above fact concludes, that the Latin language, after adopting the Doric alphabet, in the course of its development, entered upon a stage in which its pronunciation became deteriorated, and the Romans lost the delicate power of distinguishing between these several sounds, during which stage the guttural smooth became so much softened as to sound like the middle *g*, he evidently confounds the written character of the letter with its sound; neither does he assign any reason whatever for this assertion. Mr. Mommsen feels the want of such a reason, and in the passage above quoted says: "Among the twenty-one letters of the oldest Latin alphabet, the letter *k* has preserved itself in common use only in a few abbreviations and in the alphabet, and in consequence of its disuse, the letter *c* has ceased to represent the guttural middle, and has taken its place. The fact, that the letter *c* was used in the oldest Latin alphabet for the middle, and the letter *k* for the smooth, is proved by the "*Notae*," in which *K* represents the smooth and *c* in *Gaius* and *Gneius*, the middle, (Mar. Vict. p. 2469, P.) Afterwards, very likely owing to Etruscan influence, as Müller II., 312, correctly observes, perhaps in consequence of the overpowering immigration of large bodies of Tuscans, ("massenhafte Einwanderung von Tus kern,") into Rome, the middle no longer was distinguished from the smooth, and the latter only was pronounced. The reason, again, why the letter *c* was chosen to represent it in writing, can only be explained by Tuscan influence, where, not in the older, but in the later alphabet, the letter *c* designated the smooth. In this manner they wrote at Rome at the time, when the XII tables were composed and the "*leges regiae*" were written: hence appears, that at that period a considerable time had already elapsed after the first stage of the Tuscan and Latin alphabets, and that the time, when it was agreed that the letter *c* was to represent the sound of *g* in *Gaius*, and *K* that of the guttural smooth, in *Kaeso*,

Kalendae, Karthago, kalumnia, kaput, dates long before the year 300, A. U. C. When, subsequently, the Latin element again rose, and, after the expulsion of the Tuscans, the Roman system of sounds again became prevalent, the want was felt of expressing the middle as well as the smooth *c*."

If Mr. Mommsen bases his theory on an immigration of large bodies of Etruscans, we fear that it rests on a rather precarious foundation, since history does not warrant any such statement.* The Luceres of Romulus, in case they ever existed, do not seem to have been so very numerous. And as regards the intimations of the emperor Claudius, that king Servius was of Etruscan descent, they lack sufficient confirmation; and when the Romans, upon making peace with Porsena, returned to him that part of the Etruscan territory which they had conquered, it scarcely amounted to more than one-third of their dominions, at the utmost valuation. Moreover, since no traces whatever are discovered in the Latin language of the Etruscan element, it can scarcely be imagined that the Etruscan language ever exerted such a powerful influence upon the Latin, as to change the pronunciation of any of its sounds. Now, by disproving the fact, that the Latin language ever became impeded by the Etruscan, the whole theory of Messrs. Corssen and Mommsen falls to the ground, and we have to admit, either that the Latin member of the Indo-European chain of languages had originally only the hard guttural sound, viz.: the guttural smooth, which

* *Schwegler*, *Römische Geschichte*, 1853, Vol. I., pag. 273-278. *Lange*, *Römische Alterthümer*, Vol. I., pag. 55. 1856, where he says: "The influence of Etruria on Latium, and particularly upon Rome, has been overrated for a time, but in modern times it has very justly been discredited." Even *Mommsen* himself, in his *Roman History*, published four years after his "*Unteritalische Dialecte*," 1854, says, Vol. I., page 86:—"As much as we can see, during the entire period, when Rome was under the government of kings, Etruria did not exercise any essential influence either on the language or the customs of Rome, and much less has it interrupted the symmetrical development of the Roman state and the Latin alliances."

was afterwards, in a certain number of stems, softened into the middle, (which hypothesis is not at all improbable,) or, we must suppose, that it had originally a guttural middle, which, in former times, shared its character with the guttural smooth *k*, until the Romans invented a new sign for it.

In favor of the first hypothesis, we may say that the stronger sound is usually the older, and not *vice versa*, e. g., in one of the oldest words, the personal pronoun of the first person, viz. : Goth., *ik*, Saxon, *ic*, Dutch, *ik*, Scand. *jag*, (*jah*), *jeg*, (*jeh*), Germ. *ich*, Suabian, *ih*, Engl. *I*, and again Lat. *ego*, French, *je*, Ital. *Io* for *ejo*, (*eyo*.) Span. *yo* for *eyo*, *iyo*, Port. *eu* for *ehu* or *eyu*, Greek, *ἐγώ*, Aeol. *ιῶ*.

As regards the other hypothesis, we have repeated proofs, in various languages, that several sounds are expressed by one written character, e. g., in *English*, each of the vowel-signs represents two or three different sounds, the letter *g* is pronounced differently in *geese* and *genitive*, in *giver* and *giant*; in *German*, "ch" is pronounced like *k* before *s*, (as in *Fuchs*, fox, *ochs*, ox,) and yet it is spelled *ch*, and the vowel *e* in *legen*, *weit* and *Leute*, is pronounced quite differently in *leben*, *breit*, *Freude*. Although the *French* have a guttural middle character, they still pronounce universally (according to Du Vivier, in his "*Grammaire des Grammaires*,") the letter *c* in *second*, like *g*, which word is spelled *segundo* both by the Spaniards and the Portuguese. The Greek translation of the septuagint, in the proper nouns, shows that the Hebrew *Ain*, like the Aramean (cfr. ע in ארע and ארק, earth,) and the Arabic, had several pronunciations; and the *Arabs* also, if they would follow the advice of Mr. Wallin, (*Zeitschrift der deutschen morgenländischen Gesellschaft*,) would have to invent several new signs.

Rather than admit such a temporary deterioration of the Latin, we would regard the letter *c* as an abbreviation of the letter *k* or *kappa* Κ, C, C, where all we want to make it look like *c* is to drop the perpendicular line on the left, which has been done in some of the alphabets, see Mommsen, pages

6, 7. Since the Italian nations were no learned grammarians, they contented themselves with the letters of the alphabet as they found them, even when the sounds therein represented did not altogether coincide with their own; we need but remind our readers of the promiscuous use of the short *e* and *i*, and the dropping and retaining of the final *m* and *s*, sometimes in words of the same inscriptions.

At the time of the first Punic war, a new letter, *g*, was invented for the guttural middle, and by a manumitted slave of Sp. Carvilius Ruga, (who held school in Rome, and first used it in writing,) was inserted in the alphabet between F and H, in the place of the letter Z, which had become obsolete and was deemed unnecessary. At the time of Cicero the Greek, *v* (*y*) was adopted for foreign words, especially for Greek; about the same time also, the Greek aspirates *ϑ*, *φ*, *χ*, were expressed by *th*, *ph*, *ch*, and the letter Z, which had been cast off, was re-adopted and placed at the end of the Latin alphabet. Thus the Latin alphabet finally consisted of the following twenty-three letters:

A, B, C, D, E, F, G, H, I, K, L, M, N, O, P, Q, R, S, T, V, X, Y, Z.

Verrius Flaccus, the learned cotemporary of Varro (127 — 116 before Christ,) proposed to introduce a new sign for the final *m*, (at the close of words,) which had an obscure and indistinct sound and was frequently omitted in old Latin writings. Velius Longus says (p. 22, 28,) "*Nonnulli synalæphas quoque observandas circa talem scripturam existimaverunt, sicut Verrius Flaccus, ut ubicunque prima vox m littera finiretur, sequens a vocali inciperet, M non tota, sed pars illius prior, N scriberetur, ut appareat exprimi non debere.*" It does not, however, appear that the proposed character was ever employed in writing.

The Emperor Claudius, who was a philologist, (Fr. Buecheler, De Ti. Claudio Cæsare Grammatico,) commanded that in order to distinguish the letter *v* from the vowel *u*, the former should be expressed by the inverted digamma *Ɑ*, also,

that the Greek letter ψ = *bs*, *ps*, should be represented by the antisigma σ , and the intermediate sound between *i* and *u* by the Greek breathing ρ . The first and last of these three characters are, accordingly, often found in inscriptions, dating from this time. The spellings of *ai* instead of *ae*, and of *oi* for *œ*, which appear in the same inscriptions, are, no doubt, innovations caused by him; but they perished at the same time with their originator.

Since the Latin consonants in the beginning and middle of words were usually pronounced stronger, fuller and heavier, they were generally not sharpened in the old Latin by doubling; hence, also, they very seldom appear doubled in inscriptions before the times of Ennius; but by his example from the time of the second Macedonian war, this mode of sharpening or strengthening became generally prevalent, and has been universally adopted after the times of the Gracchi. (Ritschl Tit. Mumm., p. 4; Mon. Epigr. tria, pag. 10, 32, tit. Aletrin. IV., VI.; Rhein. Mus. IX. 12, 13.) Instead of doubling the *sicilicus*, also, was sometimes employed; Mar. Victor., p. 2456, "*Antiqui—supra litteram quam geminari oportebat scilicet Sicilicum imponebant, cujus figura haec est, quod erat signum geminandi, sicut apparet in multis adhuc veteribus ita scriptis libris.* (Isidor. Orig. I. 26.) "*Ubi litterae consonantes geminabantur, sicilicum superponebant ut sel'a, ser'a, as'eres.*" This mode of writing, however, became soon obsolete, and is never found in inscriptions.

In order to express the long vowels *a*, *e*, *u*, in writing, the tragedian Accius, according to Velius Longus, proposed to double them. "*Accius geminatis vocalibus scribi natura longas syllabas voluit, cum alioquin adjecto vel sublato apice longitudo et brevitatis nota posset ostendi.*" According to Ritschl, this mode of writing is found in inscriptions from the time of the Gracchi to the Consulship of Cicero, *e. g.*, *Albaana*, *Vaarus*, *paastores*, *haace*, *Maarco*, *Maarcium*, *Feelix*, *luuci*, *Muucio*, *pequlatuu*, *uutei*, *leege*,

seedes, ee, leegei. The vowel *o* Accius did not double, because it was not done in the Oscan language; nor the vowel *I*, because **EI** was used instead at his time; still, this mode of spelling was never generally adopted. The double **I** = **II** could not be used to express the long *I*, because it was frequently put instead of **E**; see Mommsen, *Rhein. Mus.* X., 142; wherefore, in olden times, **EI** was not only written in the place of the intermediate sound between *ē* and *i*, but also for the proper sound of *i*. Besides the digraph **EI**, as early as the time of the Gracchi, a tall letter *I* likewise, extending above the rest, was used for this purpose; see Ritschl, *Rhein. Mus.* VIII. 494; Mommsen, *Rhein. Mus.* X. 142. Thus we find, *Popilius, Calld., quInque, QuInctilio, Uictor, trIstior, etc.* When, at the time of Augustus, the spelling of **EI** became obsolete, the use of the tall *I* became more general, and it is found in the very best and most complete monuments of the times of Augustus, as in the inscriptions of the obelisks, in the cenotaphs of Pisa, the two funeral orations, and generally, in the inscriptions dating from the times of the early emperors, while the other long vowels were marked by the apex which was placed over them. For, since the time of Augustus, a third mode of pointing out the long vowels was introduced, viz., by placing an *apex* over the vowels. From Weil's and Benloew's "*Théorie générale de l'Accentuation Latine*," Chapt. XII., des inscriptions accentuées, p. 293-348, it appears that this apex (Quint. I, 7, 2. I. 4, 10; Vel. Long., p. 2220; Ter. Scaur., p. 2253,) in inscriptions had usually the form \wedge , seldom the form $\overset{\cdot}{\wedge}$, and in manuscripts also, the form $\bar{}$ (Isid. Orig. I. 4, 18.) The apex replaced the second of the two vowel-signs by which Accius expressed the long vowels, and, as the apostrophe indicates the place of a vowel which is omitted, so also the apex shows that a vowel is long. Mr. Corssen says, that the placing of the apex is most carefully observed in the monuments handed down to us from the times of Augustus to Claudius, particularly in public documents, and in other

similar writings which required to be written carefully. In most of these writings the tall letter I, also, is used to express the long i. From the examples given by Mr. Corssen, we select the following where the vowel is not generally supposed to be long, viz., *actus*, *exactus*, *redacta*, *atri*, *Martio*, *translata*, *ventens*, *regni*, *nolens*, *notesceret*, *deficiens*, *consto*, *consecrat*, *bosque*, *ornamentum*, *ornatissima*, *consecuta*, *debeo*, *jus*, *lucti*, *iusti*, *illi*, *ussu*, (assimil. for *utsu*), *ultra*, *sejunctum*. Still, however little we find of strict regularity in the inscriptions, as regards orthography, we find just as little in the marking of long vowels by the apex; indeed, there is scarcely a single inscription, where the apex is employed throughout and in the right place. Subsequently to the third century after Christ, especially, when the common people were no longer conscious which of the vowels were short and which long, it was to be expected that the mark, expressing the length of the vowels, would be either frequently omitted or wrongly used. The fact that the quantity, in inscriptions of the best times, is expressed by the apex, furnishes us with a clear proof that the accent of a word was never expressed in the Latin by the marks \angle \simeq \sim , which were employed for this purpose in Greek; for in the Latin language they were used to express the quantity, and there is no trace of any sign whatever, marking the accent, either in inscriptions or manuscripts. Mr. Corssen, in closing this subject makes the following remark: "Since the place of the accent in Latin words was much more definite and dependent upon quantity, than in the Greek, it was at once known, which syllable had the accent, by pointing out which vowel in the word was long, inasmuch as the end-syllables were always unaccented, and, therefore, the Latins could much better dispense with a sign for the accent, than the Greeks, in whose language the laws of accentuation were more various and less limited."

CONSONANTS.

Gutturals.

C.

Before entering with Mr. Corssen upon a discussion of the pronunciation of each of the Roman letters, we must remind our readers that we cannot expect the uneducated Romans to have been as punctiliously correct in penning their inscriptions and other writings, as learned grammarians would have been ; that there is a possibility, consequently, that, in writing down sounds, they at times used letters, strictly representative of other sounds, to which, however, they have a resemblance ; and that this might have been the case, even supposing the Romans to have been very particular in representing each sound of their language by a corresponding letter. We must, therefore, admit the possibility that, at a time, when the letter *b* still sounded quite differently from the letter *v*, *bicsit* may have been written instead of *vicsit* or *vixit*, *Burrus* instead of *Pyrrhus*, that the Greek word *τριамπε*, may have been spelled in Latin *triampe*, the Greek letter *φ* represented by the entirely different letter *f*, instead of *ph*, and so forth.

The fact that the letter *c*, *through the entire duration of the western Roman empire*, had the sound of *k* is proved, 1. by words handed down from the most ancient times as *Aecetiai* instead of *Aequitiae* (Ritschl, de fict. litt. Lat. antiqu. p. 17), and *dekem [bres]* instead of *Decembres*, in the very ancient inscription of the Columbarium of Somaschi; 2. by the Greeks, when they commenced to transfer Latin words into their own language and to spell them with their own letters, always expressing the letter *c* by *k*, even before the vowels *e* and *i* ; as is shown in the following examples which are selected by Mr. C. from among many others, e. g. *Κῆνσον*, *censum*, *Κενταρίωνες*, *centuriones*, (Polyb.) *Κρησεντίνα*, (Dio Cassius), *ποντίφικες*, (Dion. Halic.), *πριγκίπια*, (Plut.)

3. by the Romans, as soon as they commenced to spell Greek words in their own language, always using the letter c to express the Greek letter κ , e. g. *Cecrops, Citix, Cybele, cedrinus, Cimon, cygnus, cera, cerasus, cithara, Cyprus, cetus, etc.* ;

4. by those Latin words which in the time of the empire were received in the Gothic tongue, and in other German dialects, and in which the letter c was invariably rendered by the letter k.

Gothic.	Latin.	Mod. German.	Latin.
<i>aikeits,</i>	<i>acetum,</i>	<i>Kaiser,</i>	<i>Caesar,</i>
<i>aurkeis,</i>	<i>urceus,</i>	<i>Keller,</i>	<i>cellarium,</i>
<i>karkara,</i>	<i>carcer,</i>	<i>Kerker,</i>	<i>carcer,</i>
<i>lukarn</i>	<i>lucerna</i>	<i>Kerbel,</i>	<i>cerefolium,</i>
		<i>Kirsche,</i>	<i>cerasus,</i>
		<i>Kicher,</i>	<i>cicer;</i>

5. by the fact that the letters c, g, k and q are used indiscriminately in inscriptions from the most ancient to the latest times, while the letter c still preserved its guttural sound before the vowels e and i, e. g. *Ceminius* (Geminus), *cenialis* (genialis), *Primigenius* (primigenius), *Vercilia* (Virgilia), *Cintus* (Quintus), *liquebit* (licebit), *requiesquet* (requiescit), *quaesquenti* (quiescenti), *quesquit* (quiescit), *cesquet* (quiescit), *sicis* (siquis) ;

6. by the writing of Latin words with Greek characters in documents of the sixth and seventh centuries after Christ, e. g., $\delta\epsilon\kappa\epsilon\iota$, $\delta\epsilon\kappa\iota\mu$, for *decem* ; $\phi\acute{\epsilon}\kappa\iota\tau$, $\phi\iota\kappa\epsilon\tau$, $\phi\eta\kappa\iota\tau$, for *fecit* ; $\phi\epsilon\iota\chi\alpha\rho\omicron\mu$, for *fecerunt* ; $\pi\alpha\chi\epsilon\iota\phi\iota\kappa\omicron\varsigma$, for *pacificus* ; $\upsilon\epsilon\nu\delta\epsilon\tau\rho\iota\chi\alpha\iota$, for *venditrici* ; $\delta\omega\nu\alpha\tau\rho\iota\chi\iota$, for *donatrici* , $\kappa\rho\upsilon\upsilon\chi\epsilon\iota$, for *cruces* ; $\beta\iota\kappa\epsilon\delta\omega\mu\epsilon\nu\omicron\varsigma$, for *vicedominus* ; $\kappa\iota\beta\epsilon\tau\alpha\tau\epsilon$, for *civitate* ;

7. by the Roman grammarians of the fourth and fifth centuries declaring the two letters c and k to be so perfectly identical, as to be inclined to regard one of the two as superfluous ; also by their never mentioning any different pronunciation of the letter c before any of the vowels This statement

is made by *Diez*, in his "Grammatik der romanischen Sprachen," I. 197, and Mr. Corssen is right in endorsing it.

The case is different, however, with the sound of the letter *c*, when followed by two vowels *ia*, *ie*, and *io*, in which case a wavering is observed, in the inscriptions, even in the second century after Christ, between the spelling of *ci* and *ti*, and as the same thing is observed in the manuscripts, we must conclude, that this tendency towards an interchange between *ci* and *ti* dates to a somewhat earlier period in the history of the Roman language, and that it, in the course of time, developed itself still more. Again, as it is a thing unheard of in the Latin language, that the guttural smooth changes into the dental or lingual *t*, or *vice versa*, when they are placed between two vowels, Mr. Corssen concludes further, that the ground of this development of the same pronunciation in two consonants which are originally entirely distinct from each other, is to be sought for in the combination of the vowels *ia*, *io*, *iu*, *ie*, when they are preceded by the consonants *t* and *c*. Mr. Corssen's* idea is, that the vowel *i* was first changed into the semi-vowel *j*, which is equivalent to the English *y* in *year*, *you*, etc. This semi-vowel is very nearly allied to the sibilant letter *s*, and when it is pronounced rapidly before another vowel, and is at the same time preceded by the consonants *c* or *t*, it very easily passes over into this sibilant letter. After the vowel *i* has by this means become sibilant, it afterwards assimilates or "*assibilates*" the preceding guttural letter. This process can be traced in the Umbrian, Volscian and Oscan languages, as well as in the Greek, viz., *μαρίων*, *μάσσω*, *ὀλιγίων*, *ὀλίζω*, *παρίων*, *πάσσω*, (*ἑρίων*.) *ἧσσω*, *ταρίων*, *θάσσω*. This sibilation, which at first was quite weak, in the course of time extended itself to the syllables *ce* and *ci*, when not followed by any other vowel.

To this we would add, that in the sibilation of the letter *c*

* In conformity with Mr. A. SCHLEIERER in his "Sprachvergleichende Untersuchungen," etc., Bonn, 1848.

before e and i, we may distinguish in the Romance idioms, several stages of development. In the *first stage* it sounded like ts or like the German and Italian letter Z; * this we find illustrated by the Latin words, transferred into the Greek language¹ in the sixth and seventh centuries, in which the Latin letter c is no longer regularly expressed by the Greek z, but by the letters τ ζ, e. g. τζέπτα, ιντζέπτος, *incertos* (in the Basilics;) it is further illustrated by the Latin words, received at that time, in the German language, e. g. *Zelle*, *Zirkel*, *Züher*, also by the pronunciation of the letter c in the Spanish language, before e and i, where it sounds very much like the sibilant letter th of the English; but above all, by many words in the Old Italian language, when it first began to develop itself from the Latin. In these words the Latin letter c is expressed by the Italian letter z = ts, e. g. *offizio*, *uffizio*, *giudizio*, (judicium), *zeppa*, (cippus), *calza*, (calcea); subsequently, in the modern Italian language, (and the North Walachian, Diez., II. p. 233,) when the letter c, before e and i, entered upon its second state of sibilation, the original letter c was again restored, but was weakened into *tsh*, e. g. *officio*, *giudicio*. The letter c is also preserved in its first stage of sibilation in some South Walachian words, as *atzē* (acies), *atzet* (acetum), and in Germany it is still universally so pronounced. In the modern Italian and the North Walachian languages we find the letter c in its *second stage* of sibilation, when it sounds like *tsh*; and in the other Romance languages of the West, finally, and also in the English, in its *third stage*, where it acquires the sound of the sharp s or sh.

One peculiarity of the guttural smooth, in the Latin language, is noted by Mr. Corssen, viz. that it is lost before the letters n and t, after the liquids r and l, when followed by t and s, viz. *aranea* (ἀράχνη), *deni* (decem), *lana* (λάχνη), *quini*

* Still now-a-days in the South Walachian and in some Italian and Portuguese dialects, cfr. Diez, Gr. d. R., Spr. pp. 232, 233.

(quinque), *luna* (luceo), *artus* (arceo), *fartus* (farcire), *tor-tus* (torqueo), *parsimonia* (parco), *cortis* (ἔπος), *mulsi*, *mulsum* (mulceo), etc.

K.

The letter K had precisely the same sound and signification as the letter C, but from the most ancient times it was preserved only, when the words *Kaeso*, *Kalendae*, *Kalumniā*, *Kaput*, were written with capital letters, as may also appear from Quint. I. 4, 9; Vel. Long., p. 2218; Terent. Scaur., p. 2252; Ter. Maur., p. 2400; likewise, in the ancient inscription of the columbarium of the Vigna Somaschi, the abbreviation *dekem.* occurs instead of Decembres. Some grammarians recommended to write k instead of c, whenever it is followed by the vowel a. This theory, also, is found confirmed by many inscriptions in which we find the following words: *Karissimo*, *Karissimae*, *Karo*, *arkarei*, *arkarius*, *Kristus*, but it has never been generally adopted.

Q.

The Latin letter Q took its origin from the Doric *Koppa* of the Cuman alphabet, but it developed itself in a manner of its own, in the Latin language. It is one letter, representing a single sound, generated in a regular manner from the guttural smooth k or c. The letter v or u by which it is followed, neither represents a full vowel nor consonant, but describes a sort of vocal-labial after-sound, which before the vowel a sounded like u, before the vowels æ, e and i like a mute v, and when it was followed by u, coalesced with it in a simple u, so that in olden times, especially since the time of Accius, QV was written and pronounced instead of QVV, and in later times CV. Hence, QV is the point of transition, where the guttural smooth k passes into the labial p, as is shown by Mr. Corssen in the following scheme.

	K.		Qu.		p.
Sanscr.	kis,	Latin.	quis,	Umbr. } Sab. Osc.	pis,
"	kim,	"	quem,	Osc.	pim,
"	kat,	"	quod,	"	pod,
"	kam,	"	quam,	"	pam,
					pan,
				Umbr.	pa,
Latin.	cujus,	"	quojus,	Osc.	pieis,
"	cui,	"	quoiei,	"	piei,
"	cum,	"	quom,	"	pon,
"	cumque,	"	quomque,	"	pumpe,
	cunque,				
Greek.	πόση,	"	quanta,	Umbr.	panta,
				Greek.	πόση,
Sanscr.	átvar,	"	quattuor,	Umbr.	petur,
				Osc.	petiro,
				Greek.	πίσυρες,
		"	quinque,	"	πέμπτε,
				Sanscr.	panćau,
		"	quintum,	Osc.	pomtis,
Latin.	cocus,	"	coquo,	Latin,	popina,
Sanscr.	pać,			Greek,	πίπω,
"	aćvas,	"	equus,	Latin,	Epona,
Greek.	ἵππος,			Greek,	ἵππος,
Latin.	secundus,	"	sequor,	"	ἵπομαι,
"	relicuos,	"	linquo,	"	λείπω,
"	torculus,	"	torqueo,	"	τρέπω,
"	oculus,			"	ὀπτομαι,
"	insece,			"	ἐνεπτε,
Greek.	λύκος,	Sancr. vrkas,	Greek, λυγος.	Latin,	lupus.

G.

The letter g or the guttural middle has been formed at a later period from C, and makes its first appearance at the

time of the first Punic war. The fact that the letter *g*, in some words, in later times, took the place of a former *c*, applies merely to the writing, as we have seen above, and not to the sound itself, and therefore, the question whether there was originally a guttural middle and smooth in the Latin language which were both represented by the same character, or whether the original smooth, at a later period, in some stems was softened into the middle, remains undecided. Among those words which in the oldest documents were spelled with *c*, and afterwards with *g*, are the following: before *a*, *gamelum* for *camelum*, *gaunaceam* for *caunaceam*, before *o*, *gobius*, *κωβίός*, *negotium* for *nec-otium*, *concordia* for *concordia*; before *u*, *gubernator* for *κυβερνήτης*, *gummi* for *κόμμι*, *gurgulio* for *curculio*; before *i*, *triginta* for *τριάκοντα*, *mugio* for *μυζάομαι*; before *e*, *Germalus* for *cermalus*; before *l*, *negligo* for *nec-lego*; before *r*, *grabatus* for *κράβατος*; before *n*, *Progne* for *Πρόγνη* and many others.

In some cases the letter *g* is destroyed, *e. g.* before *l*, *lactis* (*glactis*) *γάλακτος*; before *n*, *natus* (*gnatus*), *navus* (*i-gnavus*), *narrare* (*gnarigare*, *gnarus*), *notus* (*gnotus*), *nosco* (*cognosco*); before *s*, when preceded by *l* or *r*, *algeo*, *alsi*; *mulgeo* *mulsi*; *fulgeo* *fulsi*; *indulgeo* *indulsi*; *spargo* *sparsi*, *tergeo* *tersi*, *tersum*; before *t*, *autor*, *autumnus* (*augeo*); before *m*, *examen* (*exagmen*, *exigere*), *flamen* (*flag*, *φλεγ*—*flagrare*), (*fulmen* for *fulgmen*, *fulgeo*); before *i*, after it has first changed into *j*, for the sake of euphony, *maior* for *magior*, *maius* for *magius*, *meio* for *miio*, *migio*, *puleium* for *pulegium*.

There are some traces left, showing that the assibilation of *g* before *e* and *i* which is found in the Italian, French and Portuguese languages, has been prepared in the latest Latin vulgar tongue, see Corssen I., 45, 46.

H.

Concerning the letter *h*, Mr. CORSSSEN says, I., p. 46, "The breathing sound *h*, which is a mere ejection of the breath

from the wind-pipe, was originally found combined in the Indo-European languages with the solid gutturals, dentals (linguals) and labials, with which it formed the aspirates bh, ph, gh, ch, dh, and th. Through the intensity of the breathing, the solid ingredients, i. e. the mute consonants were afterwards frequently lost and the breathing sound *h* was all that remained."

When the Romans adopted the Cuman alphabet, the guttural aspirate does not seem to have fitted their tongue, as they have no particular letter, distinguishing it from the mere breathing sound, and as, subsequently, in the times of Cicero, they expressed the Greek letter *x* in Greek words imported into their own language, by the letters *ch*. The fact that some relic of the guttural aspirate still remained in their language, is shown by the forms *Traho*, *traxi*, *tractum*, and *Veho*, *verxi*, *vectum*, whose letter *h* could not have turned into the smooth, before the sharp letters *s* and *t*, unless some vestige of the guttural aspirate was still preserved in their sound. As a general thing the letter *h* in Latin represents the same breathing, which is described in Greek by the *spiritus asper* or hard breathing.

The Latin *h* very frequently took its origin from the peculiar Italic sound *f*; for instance, we meet with the Latin *harena* together with the Sabine *fasena*, the Latin *hircus* with the Sabine *fircus*, *hedus*, *edus*, *aedus* together with *fedus*, see Varro l. l. V. 97; Vel. Long. p. 2230, 2238, Henop, de Lingua Sabina, p. 17. Within the Latin language itself we find *hoedus* for *foedus*, *holus* for *folus*, *hostis* for *fostis*, *hostia* for *fostia*, Fest.; *Hormiae* for *Formiae*, Plin.; *hordus* for *fordus*, *haba* for *faba* [compare also Span. *haba*, Port. *fava*,] *hariolus* for *fariolus*, *hebris* for *febris*, Serv. Virg. Aen. VII., 1693. In the dialect of the Faliscians we also find *habam* instead of *fabam*, Ter. Scaur. In a similar manner we find *mihi* for *mifi*, although this dates as far back as the Sanscrit; in the Umbrian, however, we find *tefe*, which is changed in the Latin into *tibi*.

The semi-vowel *j*, (Engl. *y*) became *h* and was subsequently also dropped, e. g. *ahenum*, Umbr. *ahesnez*, Sanscr. *ajas* (iron); *Mahestinus* instead of *Majestinus*.—As regards the dropping of the letter *h* we even find in the “*Senatusconsultum de Bacchanalibus*” *abuisse* instead of *habuisse*, but on the other hand, *harenam* instead of *arenam*.

With respect to Quintilian's statement, which Mr. C. endorses, that the ancients very rarely used the breathing letter *h*, which he proves by their spelling *oedos* instead of *hoedos* and *ircos* instead of *hircos*, in ancient inscriptions, we must be careful how we adopt his declaration. We have remarked above that, as the ancients were no scholars, they were not so very particular in matters of orthography, but frequently contented themselves with merely approximating to the sounds of their words in spelling. Quintilian, as little as we ourselves, heard the ancients pronounce those words, but like us concludes, that inasmuch as these letters are wanting in the inscriptions, they also must have been wanting in the pronunciation. But ought we to infer from the spelling of the very old word *duonoro* or from the accusatives on the tombs of the Scipios, that the letter *m* in these accusatives was not pronounced, because it was not spelled? As regards the passage in Gellius, where Nigidius Figulus says, “*Rusticus fit sermo, si aspires perperam*,” as the context leaves it undecided what the particular meaning of the passage is, we are very strongly inclined to believe, that Figulus intended to reprove the very same vice which we notice in English peasants and towns-people, viz., that of dropping their *h*'s and placing them where they are not needed, as, “as your haunt harrived?” If this thing is done in our days by people who ought to know better, we should not wonder that unlettered Romans wrote *haditus*, *hauctoritas*, *exhitus*.

Mr. Corssen closes his history of the Roman breathing sound, by stating, that the process of dropping the *h* in the beginning of a word, and eliding it in the middle, as is shown in the Italian language, was consummated at the close of the

fourth and the beginning of the fifth century after Christ. We endorse this statement of Mr. Corssen, so far as he speaks of the vulgar tongue, but we hold that the educated portion of the Roman people still continued to write and to pronounce the letter *h*, as even in the Italian language it was not yet entirely lost, but continued both to be pronounced and to be written. This we conclude from the fact that the Latin letter *h* was still used for many centuries in the old Italian language, of which fact we became convinced, upon reading an old edition of Machiavel in which, for instance *ora* (now) is still spelled *hora* (horâ) and in support of our argument we claim the same thing for the letter *h*, of which Mr. Corssen, page 105, lays claim for the letter *n*, which is not expressed in writing, viz.: that the fact of its not being expressed in writing shows, that the ear no longer discovered in it the sound of a *full n*.

LABIALS.

P.

The labial smooth *p* sounded in the Latin as it does in all the other Indo-European sister-idioms, [with the single exception of the French]. It partly grew out of the guttural smooth through the medium of the letter *qu*, as has been shown above. According to Mr. Corssen, it very rarely developed itself in the Latin language, from the letter *k*, through the medium of *qu*. Instances of this kind are merely *Epōna*, derived from *equus*, *popīna* from *coquo* (πίνω), *lupus* from λύκος. *Mapalia*, and, at the same time, *Magalia*, he can only explain by saying, that it originally was spelled with the letter *c*, which, on the one hand was softened into *g*, and on the other hand was changed into *p*.

Whenever a letter was thrown off at the end of a word, and the letter *p* thus became the last letter in the word, it invariably was softened into *b*; for example, *ab*, Gr. ἀπο, Sanscr. *apa*; *ob*, [Greek ἐπί,] Umbr. *up*, Sanscr. *upa*; *sub*, Gr. ὑπό,

Sanscr. *upa*. [In the Spanish and Portuguese languages the letter *p* before *r* is changed into *b*, and in the Italian and French into *v*, e. g. *pauper* and *super*, Sp. and Port. *pobre*, *sobre*, Ital. and French *pauvre*, *povero*, *sovera* and *sopra*.] Before the sharp letters *s* and *t* this letter *b* is again changed into *p*; and this mode of writing prevailed in the two last centuries of the republic; for instance, *apstulit optinebit*, *supstituta*, *opscurus*. The grammarians sometimes followed the pronunciation, and sometimes the etymology, regarding the forms *ab*, *ob*, *sub*, as the primitive forms in their language. Quintilian affirms in the following words that the letter *b* was pronounced like *p* before *t*, "*Cum dico obtinuit secundam b literam ratio poscit, aures magis audiunt p.*" Varro and Priscian in the words *urbs*, *trabs*, etc., followed the etymology, and thus this remained the prevailing orthography of the grammarians. In the oldest manuscripts of Plautus and Virgil, and also in the book of Cicero "*de republica*," the spelling of *ps* and *pt*, according to the pronunciation, is much more frequent than in the later manuscripts; so also in the Gajus manuscript at Verona, and in the oldest Cicero manuscripts in general. In the old Latin language the letter *p* is moreover aspirated and becomes *f* in *af*, whenever it is placed at the end of a word; it is preserved, however, in Plautus in the form of *volup*, instead of *volupe*.

In a sort of mediating capacity the letter *p* is placed between the letter *m* and *a* following dental, as *em-p-tus*, *sum-p-si*, *hiem-p-s*. It is wrongly placed in *temptare*, instead of *tentare*, because originally there is no letter *m* in the word: see Corssen, page 54-57.

B.

During the better times of the Latin language, that is, until the fourth century after Christ, when the vulgar tongue was fast breaking up, the middle labial letter *b* was sounded precisely as it now is among the Teutonic nations. Mr C. says,

among the Teutonic and Roman nations, but we know that among the Spaniards and Portuguese the letter *b* is sounded more softly, and, on this account, is often confounded with *v*; in the Danish language also, the letter *b* sounds more softly like *v*, when it is placed between two vowels. The letter *b* was hardened from *v*, after the dental middle was destroyed, e. g. *bellum* for *dvellum* (*duellum*), *bellicus* for *duellicus*, *Bellius* for *Duellius*, *bis* for *duis*, *bonorum* for *duonoro*: see Corssen, p. 58.

The fact that the Latin letter *b* had the usual sound of the labial middle, that is, a sound akin to the Greek π , is proved by the circumstance, that the Romans, at the time of Fabricius and Curius Dentatus, and Scipio Africanus and Ennius, said *Burrus* instead of $\Piύρρος$, and that in the "Carmen Arvale," the Greek word $\Sigma\rho\iota\alpha\mu\beta\epsilon$ is spelled *triampe*, and the Greek words $\kappa\acute{\alpha}\rho\pi\alpha\sigma\omicron\varsigma$, $\pi\acute{\upsilon}\xi\omicron\varsigma$, $\pi\acute{\upsilon}\rho\gamma\omicron\varsigma$, are spelled in Latin, *carbasus*, *buxus*, *Buxentum*, and *burgus*; moreover, that in the Old Latin we find the forms *poplico* and *poublicus* used simultaneously, and in the "Senatusconsult. de Bacchan.," the ante-Augustan form *hapeat*, together with *habuisse*, *scapillum* with *scabillum*, and *scapres* with *scabres*. In addition to this we have the fact, that the letter *b*, before the sharp sounds *s* and *t*, was invariably changed into *p*, which fact was ignored by Varro and other grammarians after him, because they thought, that they must follow the etymology, and, in obedience to its laws, retain the letter *b* before *s* in some cases; while other grammarians, unmindful of etymology, and strictly adhering to the pronunciation, in all cases wrote *p* before *s*. Hence the difference of spelling in the words *plebs*, *urbs*, *cælebs*, *trabs*, which are also frequently written *pleps*, *urps*, *cæleps*, *traps*, while, on the other hand, no one objected to the verbal forms *scripsi*, *nupsi*, *lapsus*, *scripturus*, *nupturus*, etc., and the prepositions *ab*, *ob* and *sub* have obtained their original sound of *ap*, *op*, and *sup*, when followed by the letters *t* and *s*.

It is nevertheless true, that, at the time of the later empe-

rors (after the third century) the sound of the middle *b*, was softened into that of *v*, i. e. into one resembling the sound of the modern Greek β . We, hence, find in inscriptions, dating from that time, many words like the following, *cibes* for *cives*, 344, A. D., *fabente* for *favente*, 367 p. Chr., *Balenti* for *Valenti*, 368 p. Chr., *vibi* for *vivi*, 386 p. Chr., *atabis* for *atavis*, *bixit* instead of *vixit*, 409 p. Chr. *Maborti* for *Mavorti*, 528 p. Chr.; see Corssen pp. 58–63.

F.

The peculiar Italic sound *f*, which was expressed by the Umbrians, Oscans and Etruscans by the letter θ , is represented in the Latin by the Aeolic Digamma, but it has nothing at all to do with the sound of this letter. It is true that we find the Latin letter *f* in words of the same root, where in the Greek we find φ , e. g. *fama* $\varphi\acute{\alpha}\mu\eta$, *fari*, $\varphi\acute{\alpha}\nu\alpha\iota$, *fui*, $\varphi\acute{\upsilon}\omega$, *fero*, $\varphi\acute{\epsilon}\rho\omega$, *fuga*, $\varphi\upsilon\gamma\acute{\eta}$, *frater*, $\varphi\acute{\alpha}\tau\epsilon\rho\alpha$; but the difference between the two sounds must have been very striking, since Cicero charged a Greek with not being able to pronounce the first letter of the name *Fundanius*, Quint. I. 4, 14. Quintilian, XII. 10, 19, finds the Latin sounds of *f* and *v* (*u*) rough and uncouth, when compared with the Greek φ and *v*, and afterwards continues, "*Nam et illa quae est sexta nostrarum paene non humana voce, vel omnino non voce potius inter discrimina dentium efflanda est; quae etiam cum vocalem proxima accipit, quassa quodammodo, utique quoties aliquam consonantem frangit, ut in hoc ipso "frangit" multo fit horridior.*" Priscian is more particular in making the difference between *f* and φ , for he says, "*Hoc tantum scire debemus, quod non fixis labris est pronuntianda f, quomodo ph, atque hoc solum interest.*" Mr. Corssen observes, that, if in pronouncing the labial aspirate we do not press the lower lip firmly against the upper lip and the upper teeth, a strong, thick breathing issues from the teeth and lips. That such is the position of the organs of speech in sounding *f*, is shown

by Quintilian's declaration "*inter discrimina dentium efflanda est*," and by Priscian's testimony, "*non fixis labris est pronuntianda*." Terentius Scaurus says concerning *h* and *f*, "*utraque ut flatus est*," and on account of this strong breathing a part of the grammarians regarded the letter *f* as a semi-vowel, Corssen, pp. 63 and 64.

On page 68, Mr. Corssen continues, "The Italic letter *f* was originally the aspirated letter *bh*; but the breathing of this aspirated middle was so marked in pronunciation, that the letter *f* became very much like the breathing sound *h*. Hence, also its labial ingredient was sometimes entirely lost in the beginning and middle of words, and nothing remained but the mere breathing sound *h*; and, on the other hand, the breathing sound of the letter *f* was sometimes lost in the middle of Latin words, so that the mere labial *b* was left."

The reason why the Greeks in transferring Latin words into their own language, expressed the Latin *f* by the Greek *φ*, and thus wrote *φορτῦνα*, *ποντίφικι*, *φερίρε*, etc., is this, that in representing the Latin sound *f* they used that letter of their own alphabet which came nearest to it. But when the Romans, after the time of Cicero, described the Greek aspirates in Latin, they represented the Greek letter *φ* by the Latin *ph*, and not by *f*; and not until the time of the later and latest emperors, was the letter *φ* in Greek words and names expressed by the Latin *f*. Thus we find in inscriptions dating from that time, *Symferusa*, *triumfatoris*, *Afrodisia*, *Filodespoto*, *Filoxeno*, *Neofito*, *dendroforo*, *sarcofago* and others.

On pages 253 and 254 Mr. Corssen traces an elective affinity between the letters *b*, *p*, *f* and *m* and the vowel *u*, e. g. *glaucuma*, (*γλαύωμα*), *optuma*, *drachuma*, *sacrufico*, *mag-nuficus*, *pontufex*, *signuficem*, *opufex*, *rubeus*, *rubustus*, *Hecuba*, etc. This elective affinity, we might add, is similar to that exhibited in the Hebrew language in the *u*-sound before the labials *Bumaph*.

Dentals or Linguals.

T.

The dental smooth *t*, in the beginning and middle of a word, sounded sharp and firm, as in the other cognate Indo-European languages; hence the fluctuation between *t* and *tt* in its spelling, both in the inscriptions and in the oldest manuscripts where we find *Atilius* and *Attilius*, *Metius* and *Mettius*, *Brutius* and *Bruttius*, *Statius* and *Stattius*, *obliteratum* and *litteras*, *cotidie* and *cottidianus*, *Attius* and *Atius*, *quatuor* and *quattuor*, and many others, see Corssen, p. 69. When followed by *s* it was either assimilated to it, or else dropped as in the following words, *quassus* for *quatsus*, *fassus* for *fatsus*, *missus* for *mittsus*, *misi* for *mittsi*, *fons* for *font-s*, *usus* for *utsus*, *fors* for *fort-s*, *Fidenas* for *Fidenats*, *Quiris* for *Quirits*.

At the end of a word the letter *T* was pronounced less strongly, and, therefore, with a number of words it was changed into *d*, (see article *d*), with others, and especially with verbal forms of the third person singular and plural, it was frequently dropped, as in the Umbrian and Volscian languages, so also in the Old Latin, e. g. *hau* in *Plautus* for *haut*, *haud*, *dede*, (Ital. *diede*) for *dedit*, *dedro* (Ital. *diedero*) for *dederunt*, *dederi* for *dederit*, *censuere* for *censuerit*. In Christian inscriptions we find *vixse* for *vixit*, *fece* (Ital. *fece*) for *fecit*, *quiesce* (Ital. *quiesce*) for *quiescit*, and in more recent inscriptions *fecerun* (Ital. *fecero*) for *fecerunt*, (compare the Latin classic form *fecere*), *quiescun* (Ital. *quiescono*) for *quiescunt*.

The fact that the Latin syllable *ti*, when followed by another vowel, was pronounced like the Greek *τi* is proved, as Mr. Corssen justly observes, p. 22, by the spelling of *Μάρτιος*, *Οὔροπόντιος*, *Πικεντία*, *Φαουεντία*, *Δεξέντιος*, *Βοχοντίος*, *Πλαξεντία*, *Οὐαλεντία* and other words by Greek authors as well as in inscriptions. At an early period, however, the letter seems to

have become a sibilant in this connection, as also in the other dialects of Italy, like the Greek; for as early as the second century after Christ, we notice in the inscriptions and manuscripts a fluctuation between the spelling of *ci* and *ti*, when followed by another vowel, and as this fluctuation was owing to the sibilation of *ti*, we hence conclude with Mr. Corssen, that this developed itself at an early period of the language, and continued to increase in the process of time. As regards the sibilation of the letter *t*, we repeat the statement we made in connection with that of the letter *c*, viz., that it is a thing unheard of in the Latin language for the guttural smooth *c* to be changed into the dental *t*, or *vice versa*, when placed between two vowels, and that the reason why these two consonants which originally sounded quite differently, began to sound alike, must be sought in the combinations *ia*, *io*, *iu* and *ie*, when following the consonants *t* and *c*. Thus we find on Christian epitaphs *Constantso* for *Constantio*, *Bincence* instead of *Vincentiae*, and in Italian documents of the sixth and seventh centuries δωρεζιονεμ instead of *donationem*, δωρεζιονες instead of *donationes*, and ἀκτζιο instead of *actio*. In the seventh century, according to the testimony of Isidor, *justitia*, *malitia*, *militia*, *nequitia* were pronounced *iustizia* (yustitsia) *malizia* (malitsia), *milizia* (militsia), and *nequizia* (nequitsia), and according to Consentius *etiam* was also pronounced *eziam* (etsiam). That this pronunciation was general is affirmed by the grammarian Pompejus in "libro Donati de barbar. et metapl." Lindem. p. 424, where he says "*Quotienscunque post ti vel di syllabam sequitur vocalis, illud ti vel di in sibilum vertendum est.*" This assibilation, however, only takes place in the middle of a word, and is suppressed whenever the letter *t* is preceded by *s*. As regards the sound of *t* before *i* when followed by another vowel, which is spelled in the above instances *ts*, *tc*, *τζ*, *ζ* and *z*, it must have been a sort of middle sound between *t* and *s*, very much like the Italian *z* or *zz*. The form *Constantso* bears the same relation to *Constantio*, as *Piacenza* and *Firenza* to *Placentia* and *Florentia*.

In these forms the letter *t* by the influence of the vowel *i* was sibilated into *z*, and the vowel *i* after performing this use was dropped, [not always, as may appear from *nunzio*, *nuntius*.] In *Constantso* the assibilation is represented by the letter *s*, and the vowel *i* is dropped. Thus far Mr. Corssen.

[According to our idea the sibilation is rather expressed by *ts=z*, and the *s* in the Oscan form *Bansae* coincides with and stands for *Bantsae*, since the latter form would not sound otherwise, than the former. In *Arezzo*, *palazzo*, etc., for *Aretio* and *palatio*, we do not regard the second *z* merely for the purpose of strengthening the first, but in our eyes it is the vowel *i* changed into *j* (*y*) and itself turned into a sibilant letter, after it has first sibilated the letter *t*, while the first *z* represents the sibilated letter *t* itself. The vowel *i* after sibilating the letter *t* may also remain intact, as in *nunzio* above, and also in *giustizia*, *tristizia*, etc., which occur, at the same time, with *giustezza* and *tristezza*.]

We finally mention the results of the critical examination of inscriptions lately made by Mr. E. Hübner (N. Jahrb. LXXVII. 39, and foll.) as reported by Mr. Corssen, page 22. Mr. Hübner states that the fluctuation between the spelling of *ci* and *ti* is not very frequent, but that the most reliable monuments from the time of the republic and the empire regularly show only one form of spelling for each word, although at times some traces of a fluctuation are visible. Amongst the words of which the spelling has been verified by the inscriptions, are *contio*, (compare *contione* with *coventionid* in the Sc. d. Bacc.), *nuntius* with its derivations (*nontius*, *nountius* for *noventius*, as *noundinae* for *novendinae*), *indutiae* for *induitiae*, *fetialis*, *otium*, *negotium*, *condicio*, *dicio*, *setius*.

D.

The dental middle in the beginning and middle of a word, sounded like the English and German letter *d*. At the end of words, according to Quintilian, it sounded a little harder, as

in *aliud*, *id*, *illud*, *istud*, *ad*, *apud*, *haud* and *sed*. From this statement of Quintilian and the recommendation of other grammarians, always to spell the afore-named neuters with the final letter *d*, in order to distinguish them from other words, having the same sound, while they do not agree about the spelling of the remaining little words, Mr. Corssen justly concludes that the Roman ear and the Roman tongue did not distinguish minutely between the sounds of *d* and *t*. Thus we find in ante-Augustan, as well as in later inscriptions, and also in the best manuscripts of Virgil, Plautus and Gajus, both *at* and *ad*, *aliut* and *aliud*, *aput* and *apud*, *aliquit* and *aliquid*, *haut* and *haud*, *it* and *id*, *illut* and *illud*, *istut* and *istud*, *atque* and *adque*, *quit* and *quid*, *quot* and *quod*, *quotannis* and *quodannis*, *quitquit* and *quidquid*. Nevertheless, in the beginning and middle of words the letters *d* and *t* were well distinguished in the Latin language, during the time of its bloom. In the neuters the letter *d* was originally *t*, for in the Sanscrit language the letter *t* is found in its stead, so that, for instance, the Latin *quod* or *quot* corresponds to the Sanscrit *kat*, and the Latin preposition *at* or *ad* to the Sanscrit *ati*. An original letter *t* is also softened into *d* in the Old Latin forms of the ablative, terminating in *d*, which occur in the oldest monuments, e. g. *Hinnad* (Ennâ, Hennâ), *praidad* (præda), *sententiad*, *extrad*, *suprad*, *ead*, *Troiad*, *suad*, *oquoltod* (occulto), *poplicod*, *preivatod* (privato), *meritod*, *Gnaivod*, *molticatod*, *Beneventud*, *Ladinod*, *quod*, *airid*, *coventionid*, *senatud*, and on the restored Columna Rostrata, we find, *pugnandod*, *altod*, *marid*, *dictatored*, *navaled*. While this letter *d* is preserved in the Oscan language, as in *suvad*, Lat. *sua*, *entrad*, *intra*, *malud*, Lat. *malo*, *moinikad*, Lat. *com-muni*, *ligud*, Lat. *lege*, *contrud*, Lat. *contro*, *aragetud*, Lat. *argento*, *dolud*, Lat. *dolo*, *castrid*, Lat. *castro*, *preivatud*, Lat. *privato*, *praesentid*, Lat. *praesente*, in the Latin language it disappeared as early as the time of the Punic war, and is only preserved, according to our idea, in *ut* and its complete form *quod* for *quot*, in

which the mark of the ablative case was no longer discerned. The form *ut*, we hold, (at variance with Mr. Corssen, who, II. 6, supposes it to be abridged from *uti*,) stands for *cut*, *cuot*, which is identical with the *quod*, classed above by Mr. Corssen among the ablatives, and which also appears in the abbreviated form *quo*. This *quod* is entirely independent of another *quod*, which is the neuter nominative and accusative of the relative pronoun; and the reason why the vowel *o* in the former *quod* from long was made short, is, because it was mistaken either for the nominative or the accusative case of the above pronoun, and also because this was done in other ablatives mentioned by Mr. Corssen, I. p. 342, 343. The Latin *ut* or *quod* corresponds to the Greek ω ; and $\omicron\pi\omega$ ($\omega\pi\epsilon$), in all its acceptations; *ut* and *quo* [*d*] are used to express *how*, *as*, *so that*, *in order that*, and (*quo*) *quod* to express *because*; ω ; itself stands for $\omega\tau$, and corresponds to the Sanscrit ablative *at*, and this *t* of the Sanscrit ablative is changed into *s* in some of its own declensions. The form *uti* seems to conflict with this derivation, but this we trace back to the Zend *kut'a*, from which, according to Mr. Bopp, page 205, we might expect *kuthā* in Sanscrit, but we find *kutham* instead.

Mr. Corssen is also right in supposing the letter *d* to have been dropped, at the end of a word, in the imperative mood, e. g. *esto* for *estod*, Osc. *estud*, *agito* for *agitod*, Osc. *actud*; *facito*, Osc. *factud*, *liceto*, Osc. *licitud* and others. With respect to the dropping of *t* in the third person of the verb, which we have noticed in our article on *t*, Mr. Corssen holds, that it was first weakened into *d*, as is also found in the inscriptions, e. g. *fecid*, *exead*, Osc. *fefacid*, *hipid*, *pruhipid*, *fuid*. Among the three forms *haut*, *hau* and *hau*, he regards *haut* as the most ancient, although usage decided to write *hau* before dentals and labials, and *haut* before vowels and gutturals. The letter *d* is assimilated, in the middle of words, to the preceding letter *n*, e. g. *grunnio* for *grundio*, *dispennite* for *dispendite*, *di-tennite* for *distendite*, *tennitur* for *tenditur*. Similar cases likewise occur in the Oscan lan-

guage, see Corssen I., 176, 177; [the same case we also observe in the Danish, among the Teutonic languages, where *manden* (the man) is pronounced *mannen*, *anden* (the spirit) *annen*; compare also the English *thunder* with the German *Donner*, and the English and German *find* and *finden* with the Swedish *finna*.]

In the article on *t* we have seen that *di* as well as *ti* is assibilated, whenever it is followed by another vowel. The Latin in this instance follows the example of the Oscan language, where we find *ziculud* in place of the Latin *dieculo*. The sibilation of *di* is proved by the testimony of the grammarian Pompejus, adduced above, who says "*Quotiescunque post ti vel di syllabam sequitur vocalis, illud ti vel di in sibilum vertendum est*." Servius, also, in speaking of the pronunciation of *di* in "*Media*," observes "*dt sine sibilo proferenda est: Graecum enim nomen est et Media provincia est*;" from which it is evident without a shadow of doubt, that in the later vulgar tongue the Latin adjective *media* sounded like *mezza*, and that the syllable *di*, consequently, was sibilated. This also appears from the spelling of the more modern Latin in the writings of the Scriptores Historiæ Augustæ, as Ammianus, Lactantius, Orosius and Isidorus, where Schneider has found the following words, *zeta* instead of *diaeta*, *zaconus* instead of *diaconus*, *zabolus* instead of *diabolus*, and *Zanium* instead of *Danium*. Compare the Greek ζά, ζαρχία, Ζώνης instead of διά, καρδιά, Διόνυσος, which was imitated in Latin by putting sometimes *di* in the place of the Greek ζ, e. g. *obridia* for ὀβριζα, *glycirridia* for γλυκύριζα, *gargaridiare* for γαργαρίζειν, *catomidiare* for καταμιζειν, cfr. *Medientius* and *Mezentius*, *Amadiones* and *Amazones*. The fact that this assibilation was consummated at the beginning of the sixth century, is proved by the words of the bishop Isidorus, Orig. XX., 9, p. 627, (Lind.) "*Mosizicia quasi modicia, unde et modicum, z pro d, sicut solent Itali dicere hodie pro hodie*." The Italian forms *mezzo*, *orzo*, *pranzo*, *razzo*, etc., hence arose from the Latin *medium*, *hordeum*,

prandium, *radius* by means of the assibilation of the letter *d*, which was effected in the late Latin vulgar tongue by the vowel *i* or *e* (afterwards changed into *i*) which had been hardened into the semi-vowel *j* (Engl. *y*). [In connection with the assibilation of the letter *d* we must moreover state, that in the majority of cases it only reached the first stage of sibilation (*z* = *ds*, *ts*) like the Swedish *dj* in *djup*, *djur*, etc., (pronounced *dsyup*, *dsyur*), and in a few words only, including some that were written with *j* without *d*, worked its way into the second stage of sibilation (*dsh*) e. g. *diurnum*, Ital. *giorno* (pronounced *dshorno*), *hodie*, Ital. *oggi* (pronounced *odshi*), *zeloso*, Ital. *geloso* (pronounced *dsheloso*); in some words of our own language, also, especially in unaccented syllables, we discover a tendency to sibilate the letter *d* before *i*, *u* (when for *iu*, *yu*), *edùcate*, *expedient*, etc.]

LIQUIDS.

L.

The Latin *l* according to Pliny in Priscian had a triple sound, "*L triplicem, ut Plinio videtur, sonum habet: exillem, quando geminatur, secundo loco posita ut "ille," "Metellus," plenum, quando finit nomina vel syllabas, et quando aliquam habet ante se eadem syllaba consonantem, ut "sol, silva, flavus, clarus," medium in aliis ut "lectum, lectus."* Its fullest sound it had at the end of a word, and hence it was never dropped; an equally full sound it had in the middle of a word, when preceded by a mute as a first letter, e. g., in *clarus, gloria, plenus, pluo, flavus*; on which account it also cast off the letters *c, t, [p]* and *st*, when they preceded it, e. g., *lactis* instead of *glactis* (γάλακτος) *latus* instead of *tlatus* (tolatus), [*latus, lateris* from *πλάτος*] *lamentum*, derived from *clamare, litem* instead of *stlitem* (Fest. pp. 313, 314,) *locum, stlocum* Quint. I., 4, 16, compare also the Spanish *llave* for *clave*, *lleno* for *pleno*, *llama* for *flamma*, *llamar* for *clamare*, *llover* for *pluere*, but in the Portuguese

it frequently becomes *r*, as in *prazer* from *placere*, or else it passes over with the preceding consonant into *ch*. Thus *plenus* is changed into *che[n]o*; in Italian, however, it passes into *i*, *pieno* *plenus*, *piano* *planus*, *chiave*, *clavem*. According to Pliny, the letter *l* sounded more lightly in the beginning, and in the middle of a word between two vowels, as in *lotus*, *hostilis*, etc. Mr. Corssen holds, that the letter *l*, in this instance, was touched slightly with the tongue and sounded like *r*, and therefore interchanged with it. Mr. Pott shows that the suffixes—*ali* and *dri* are one and the same thing, and that in order to avoid a succession of two *l*, or two *r*, language decides either for the one or the other; compare *australis*, *laralis* with *vallar* and *proeliaris*, and *ruralis*, *littoralis* with *stellaris* and *saliaris*, etc. For the same reason *caeruleus* was said instead of *caeluleus* from *coelum* or *caelum* (heaven), and *Parilia* instead of *Palilia* from *Pales*.

As the letter *l*, in the beginning and in the middle of words between two vowels was only slightly touched with the tongue, it also interchanged in these places with the dental or lingual *d*, e. g., *lacrima* instead of *dacrima*, *levir* for *δαFῖρ*, *lautia* for *dautia*, Fest. p. 68, *olere* and *odor*, *ὀδωδα*, *olfacere*, *olefacere* and *odefacit*, Fest. p. 178; *impelimenta* for *impedimenta*, Fest. p. 108. See Corssen, I., 81.

According to Pliny, the letter *l* had its weakest sound, when it was the second consonant in the middle of a word, and in this place, it was so little distinguished from *ll*, that they are frequently confounded in inscriptions. Hence we find *Amulius*, and *Amullius*, *Lalius* and *Lallius*, *Aurelius* and *Aurellius*, etc. Hence, also, we write both *mille* and *mile*, and *milia*, and *millia*; though *mille* and *milia* are the usual mode of writing. Mr. Crossen explains this, I., 82, in the following manner: The vowel *i*, when followed by another vowel, was frequently, as in *ci* and *ti*, a semi-vowel in its origin, and was therefore pronounced, in the later vulgar tongue like *j*, or the English *y* in *you*. This semi-vowel *j* or *y* sibilated the preceding gutturals and dentals, and affected the second *l* in the

middle of words in such a manner, that it was heard but very little, and the combinations, *llio*, *llia* and *lio*, *lia* could no longer be distinguished accurately, but were both pronounced *ljo*, and *lja*; hence, they were written sometimes with one *l*, and sometimes with two. This is the origin of the spelling *mille* and *milia*. This supposed original *j*, according to Mr. Corssen, was also hardened into *l* and assimilated to the preceding *l* in words like the following, *percello*, *perculi* from *perceljo*, *pello*, *pepuli* from *peljo*, *στάλλω*, *στάλος*, from *σταλγω*. This fluctuation between 'l and ll, is also found in other words; for instance, we find *vilicus* together with *villa*, *ilico* instead of *illico*, etc.; and, on the other hand, we find *ll*, where we might expect a single *l*, e. g., *loquella* and *medela*, *querella* and *suadela*, *querella*, *relligio*, *relliquiae* and *relicuos*, etc. See Corssen, I., 83.

We finally state, that, according to Mr. Corssen, I., 79, the full sounding *l* at the close of a syllable, when followed by another consonant, was preceded by a vowel-like sound very much like *u*, so that a mute *u*, that is, one which is not strong enough to constitute a syllable, was pronounced in words where it is not spelled, as in *periculum*, *vinculum*, *templum*, etc. This obscure vowel-like sound, in one of the daughter-languages of the Latin so overbalanced the letter *l*, that the latter coalesced with it: see the French *au*, *aux*, instead of *al* and *als*. [The same feature is also observed in some other languages, as in the Dutch, where we find *hout* for *holt*, Germ. *Holz*, *zoude*, Germ. *sollte*, etc. In the English language, likewise, we notice a similar passing off of the letter *l* into *u* in the pronunciation, while it is still retained in the spelling, e. g. *should*, *would*, *could*; thus instancing the whole process by which the letter *l* becomes *u*.]

R

Among all consonants, Mr. *Corssen* says, the liquid *r* is nearest to the vowels.

As the Roman grammarians do not tell us whether the Latin *r* was lingual (or dental), or guttural, he resolves the question, by examining the changes to which the letter is subject in the Latin language itself.

An original letter *s* in the middle of a word, between two vowels, is reduced to *r*, e. g. *Lares* instead of *Lases* (Carm. Arv. Lasibus), *ferias* for *fesias*, also *fesia*, *aras* for *asas*, also *aasai*, *harena* for *fasena*, and *arena* for *asena*, *Aurelii* for *Auselii*, *Spurius* for *Spusius*, and *Furius* for *Fusius*, also *eram* instead of *esam*, and *ero* for *eso*, *esit*. In the classic Latin, also, the letters *s* and *r* are found together, e. g. *quaero* and *quaeso*, *nares* and *narus*. In a similar manner we find *gero* from *geso*, *gestum*, *heri* and *hesternus*, *aes* and *aeris*, *crus* and *cruris*, and *speres* Nom. and Acc. Plur. of *spes* for *speses*. Moreover, the letter *s* in suffixes of all kinds, when placed between two vowels is reduced to *r*, e. g. *veteres* and *vetusti*, *Falerii* and *Halesus* and *Faliscus*, *Etruria* and *Etrusci*, *liberum* and *laebesum*, *arborem* for *arbosem*, *robore* for *robose*, *holera* and *helusa*, *funeris* and *funestus*, *oneris* and *onustus*, *temporis* and *tempus*, *temperi* and *tempestas*, *Veneris* and *Venus*, *venustus* and *venustas*, *plouruma* (plurima) for *plusima*, *ploerume* (plurime), together with *plusima*, *pleores* (plures) and *plous* (plus), *majoribus* from *majosibus*, *meliozem* and *meliosum* (Carmen Saliare). So also *dirimere* for *disimere*, *diribere* for *disibere*, and the Genitive Plur. *rum* for *sum*, Sacer. *sam* (Bopp, Vgl. Grammatik, pag. 285), *fabarum* for *fabasum*, *bonorum* for *bonosum*, and *dierum* for *diesum*. At the end of words, also, the letter *s* is reduced to *r*, thus *arbor* for *arbos*, *labor* for *labos*, *honor* for *honos*, and even *quirquir* for *quisquis*, see *Corssen*,

I., 87. The same applies to the letter *r* in the endings of the passive voice.

As regards the period when the letter *s*, between two vowels, began to turn into *r*, it is indicated by Cicero, where he says that L. Papirius Crassus, who was consul 336 before Christ, was first called *Papirius* instead of *Papisius*. Hence this process commenced as soon as the war with the Samnites. The change of *s* into *r*, at the end of words, is less common, but it is supposed that the letter *s* in the passive voice turned into *r* at a very early period, since we do not meet with it in any of the oldest monuments; and since in the Old-Umbrian, Oscan and Sabellian languages, also, we everywhere find the letter *r* in this connection; compare the Umbrian *emantur* and *terkantur* with the Latin *emantur* and *tergeantur*; the Oscan *sakarater* with the Latin *sacratur* and *sacrator*, and the Sabine *ferenter* with the Latin *ferentur*, *ferantur*, *feruntur*, and *feruntor*. See Corssen, I, 88, 89.

From these premises Mr. Corssen concludes, that, inasmuch as the sibilant *s*, even when pronounced softly, is certainly produced by holding the tongue against the roots of the upper front teeth and the anterior part of the hard palate, it is proved by the transition of *s* into *r* in the Latin language, that the letter *r* between two vowels and at the end of words was pronounced with the front part of the tongue, and, consequently, that the letter *r*, in these places, was lingual or dental. The same applies to the pronunciation of the letter *r* in the other Italic dialects.

Another proof of the lingual nature of the Latin *r* is furnished, according to Mr. Corssen, by the transition of the letter *d* into *r* in the Old-Latin, particularly in compounds with the preposition *ad*.

Before *v* we find, *arvenas* for *advenas*, *arventores*, *arvocatos*, *arvolare* for *advolare*, *arvorsum*, *arvorsus* for *advorsum*, *arvorsarius* for *adversarius*, *arvehant* for *advehant*, *arvectum* for *advectum*

Before *f*, *arfines* for *adfinēs*, *arfari* for *adfari*, *arfuisse* for *adfuisse*, *arferia* for *adferia*.

Before *c* and *g*, *arcesso* for *adcesso*, *arger* for *adger*, *agger*.

Before *b*, *arbiter* from *adbiterē*, and before a vowel, *meridies* for *medidies*.

At the end of words we find *apor* instead of *apud*, *aput*, *ar* instead of *ad*, *at*, See Prisc. I., 45.

The same change of *d* into *r* is found in the Umbrian; for in this dialect there is a peculiar intermediate sound between *r* and *s*, which is expressed in Roman characters by *rs*, but by the modern linguists by *r̄*.

In the middle of words before *v*, we thus find *arveitu*, Lat. *advehito*;

before *f*, *arfertur*, Lat. *adferre*;

before *k*, *arkani*, Lat. *accinium*;

before *p*, *arputrati*, Lat. *arbitrari*, *adbiterē*.

Between two vowels in the middle of a word, we find, *Akerunie*, Osc. *Akudunniad*, Lat. *Aquilonia*, etc.; at the end of a word, in the preposition *ad*, we find *asam-ar*, Lat. *ad aram*.

This intermediate sound, in some cases, becomes full *r*, for instance, we find *arveitu* together with *arveitu*, Lat. *advehito*, and *arfertur* together with *arfertur*, Lat. *adferre*, and, as Mr. Corssen observes, this principally takes place before a following *v* or *f*, where in the Latin language particularly *d* changes into *r*.

In respect to the above *ar* instead of *ad*, Priscian says, "*Antiquissimi pro 'ad' frequentissime 'ar' ponebant*;" he thus noticed the change of *d* into *r* in the oldest monuments which he knew. We only find examples of this kind in the *Senatusconsult. de Bacchanal.* and also in Cato's book on agriculture. Afterwards the letter *d* was restored in most cases, with the exception of *arbiter*, *arcesso* and *meridies*.

With regard to the position of the organs of speech, the lingual or dental *d* differs from the lingual *r* only in this

respect, that in the pronunciation of *d* the tip of the tongue is pressed firmly against the upper front teeth, and the anterior part of the hard palate, while, in the pronunciation of *r*, it strikes loosely against them, so that it is made to vibrate by the breath issuing from the wind-pipe. Hence the lingual *d* differs from *r* merely by the less energetic activity of the tip of the tongue. Subsequently, the Latin language regained its strength in this respect. Mr. Corssen holds, that this transition of the dental *d* into *r*, shows also, that the Latin *r* was lingual, and was pronounced with the tip of the tongue, as has also been inferred from the change of *s* into *r*. See Corssen, I., 88-92.

Mr. Corssen finally shows with Mr. Dietrich (De literarum in lingua Latina transpositione) and Mr. Ritschl (Rhein. Mus. VIII., 150, IX., 478,) in a large number of Latin words compared with the Greek, that the Latin *r* does not like to be preceded by a mute, but, avoiding them, withdraws behind a vowel, e. g., *cerno*, *κρίνω*, *caro* *κρέας*, *cornus*, *κράνος*, *scirpus*, *κρίφος*, *hordeum*, *κρεῖδή*, *Cretan* *κροτή*, *Hom.* *κροτή*; *torqueo*, *τρέπω*, *tarpezita*, *τράπεζα*, *tertius*, *τρίτος*.

N.

The liquid N had a three-fold sound; 1. a *sharp, firm, dental or lingual sound* in the beginning of words, and in the middle of them, between two vowels, and also before the dental or lingual mutes, with the exception of the later vulgar tongue; 2. a *weak and obscure sound*, (like the Sanscrit anuswara and the provincial (Suab.) German *n* in *Gans*, *Zins*, *Sens*, etc.,) in the middle of words before the letter *s*, and in compounds also, before the semi-vowels *j*, (Engl. *y* conson.,) and *v* and the strong labial breathing *f*, likewise after *m*, and at the end of words where it corresponds to the provincial (Suab. Bavar. Austr., etc.,) German *n*, at the end of words; 3. a *guttural sound* before the gutturals *c*, *q*, *g*, *ch*, *x*. This sound the Romans also attempted to represent by *g*, *nc*, or *c*,

or else not to express it at all. It corresponds to the French nasal *n*, and the guttural *n* of the English in *thank*, *bring*, *sing*, etc.

We shall now see, how Mr. *Corssen* establishes these points in detail.

That the letter *n* had a sharply intonated and firmly expressed sound in the beginning of a word, is proved by its never interchanging there with any other sound. It had the same strong sound in the middle of words, where it replaced the letter *m* before the dentals *d* and *t*, and, in general, wherever it preceded these two letters, see *Corssen*, I., 94, e. g. *eorundem*, *eandem*, *septendecim*, *pessundo*, *veruntamen*, *duntaxat*, *septentrio*; or, whenever in the middle of words it was placed between two vowels; hence, the frequent wavering in the spelling of inscriptions between a single and a double *n*, in this connection, e. g., *Caecina* and *Caecinna*, *Sabina* and *Sabinna*, *Munius* and *Munnius*, *Porsena* and *Porsenna*. In the oldest manuscripts of *Plautus* we also meet sometimes with a single *n* where etymology requires a double one, as *connectere*, *conexus*, *conubium*, *pinula*, *anulus*.

That the letter *n* at the close of words, sounded more softly, is proved by its frequent dropping in the nominative case of Latin stems ending in *or*, as *cardo* for *cardon*, *homo* for *homon*, *nemo* for *nemon*, etc.; likewise at the end of the forms *ceteroqui* instead of *ceteroquin*, *alioqui* instead of *alioquin*. It frequently disappears, also, at the close of syllables, in the middle of words, when they are followed by the softest and most vowel-like of sounds, the breathing sound *h*, the semi-vowels *j* and *v*, and the sibilant *s*, this, however, is only the case with the two prepositions *con* (instead of *com* or *cum*) and *in*,

before *h*, in *cohaerere*, *cohereo*, *cohibere*, *cohors*, *cohortari*;

before *j*, in *coicere*, together with *conicere* and *connicere*, in *cojunix*, *cojugi*, and *cojuci*, together with *conjunix*, *conjugi*, and *conjuci* in epitaphs during the time of the empire (in a

similar manner we obtain from *conjuncti*, through the mediate form *cojuncti*, after the elision of *j*, *counci* or *cuncti*);

before *v*, in *coventionid* (Senatusc. de Bacc.) from which we have *countionid* and hence *contione*.

The dropping of *n*, in compositions with *con* and *in*, before the letter *s*, is a very common feature in the Latin language, not only during the time of the empire, but also in the ante-Augustan age, e. g. *cosoleretur* (Senatusc. de Bacchan.) *cosol* (Scipio), *constitutio*, *costanti*, (313 p. Chr.) In Plautus we find *isculponeae*, *istega* from *insculpo*, *instega*. This elision is especially frequent in the present participle, both in manuscripts and in inscriptions, e. g. *animas* for *animans*, *doles* for *dolens*, *dormies* for *dormiens*, *infas* for *infans*, *praegnas* for *praegnans*; in the suffix *iens*, e. g. *toties* for *totiens*, *quinquies* for *quinquiens*, *quadrages* for *quadragens*; in the suffix of the ordinal numbers *esimus* instead of *ensumus*, e. g. *vicesimam* for *vicensumam*, *duodevicesimum* for *duodevicensumum*, *quadragesimum* for *quadragensimum*; likewise in the suffix, *iensi*, *ensi* in the proper-nouns of inhabitants, e. g. *Alliesis* for *Alliensis*, *Pisaurese* for *Pisaurense*. The Latin suffix *oso* had an older form *onso*, thus *formosus* is written instead of *formonsus*, *grammosis* for *grammonsis*; *onso* is in the place of *onto*, Gr. *οντο* Sanscr. *vant*. The letter *n* is also dropped before *s* in the stems of words, thus *cesor* for *censor*, *meses* and *mesibus* for *menses* and *mensibus*, *mesura* for *mensura*, *mostrum* for *monstrum*, *prasus* for *pransus*, etc. In other passages, again, the letter *n*, instead of being dropped entirely, is assimilated to *s*; thus we find *messor* for *ensor*, *formossa* for *formonsa*, *infessus* for *infensus*. Since the combinations *ens* and *es* were not clearly distinguished, we need not wonder at the Romans writing [erroneously] sometimes *thensaurus* for *θησαυρός*, *Onensimus*, etc., see Corssen, I., 100. The letter *n* was dropped more rarely before *t*, and very rarely before *d*, e. g. *regnate*, *constati*, *testameto*, *faciedos*, *καλειδας*, Corssen, I., 100. 101.

It is established by the unequivocal testimony of the

ancients, by the orthography of Latin words in Greek, and the marking of the apex, that all vowels were pronounced long before *ns* and *nf*, thus before *n* when followed by the sibilant or the strong labial breathing. Cicero has said this expressly with regard to *con* and *in* (Orat. c. 48,) "*Indoc-tus*' *dicimus brevi prima littera*, '*insanus*' *producta*, '*inhumanus*' *brevi*, '*infelix*' *longa*, *et ne multis, quibus in verbis eae primæ litteræ, quæ in 'sapiente' et 'felice,' producte dicitur 'in,' in ceteris omnibus breviter. Item-que cōposuit, cōcrepuit, cōsuevit.*"* As by the words *cōnfecit*, *īnfelix*, *cōnsuetus*, *cōstituit*, *īnsanus*, etc., in Cicero, it is also proved by the spelling of Latin words with Greek characters, that the vowel is long before *ns*, e. g. *Κῶστος*, *Κωνσταντῖνος*, see Corssen, I., 101; also by the placing the apex over the vowel, e. g. in *cōnsecrat*, *cōnsuli*, etc., see Corssen, I., 101. 102. The vowel *e* was long before *ns* in the participle, as is shown by *λότῆνς*, Plut. Num. 9; *σάπῆνς*, Plut. Tib. Gracch. 8; and also by the position of the apex in *diffidēns*, *deficiēns*, *veniēns*, moreover it was long in other nominatives ending in *ns*, as *dens*, also in *fons*, etc. The remark of Valerius Probus, "*nam correpta ante ns nullum nomen reperitur*," applies also to the adverbs of number *totiēns*, *sexiēns*, etc., and to the proper names of inhabitants and nations ending in *iēnsi*, and *ensi*, which are always spelled *ῆνσι*, both in manuscripts and inscriptions, e. g. *Πιζήνσιοι*, *Ἀχονήνδιοι* etc.; compare also *ἀττήνσους*, as well as in Gellius, *pēnsus*, and *pēnsito*, but *pendeo*, p. 103. Further, when a syllable ending in *m* receives the stress, the letter *n* beginning the following syllable is pronounced very weakly, e. g. *amnis*, *condemno*, *omnis*, *autumnus*, *solemnis*, *scam-num*, Corssen, I., 103, [compare also the English *condemn*, *solemn*, *autumn*, but the reverse in French, in which the *m* is dropped.]

The letter *n* becomes guttural, whenever it is followed by *a*

* Cfr. Gell. II., 17; IV., 17. Max. Victorin, p. 1954. Diomed. p. 428. Serg. p. 1855.

guttural, as in Greek and German, and is almost pronounced like the nasal *n* of the French. In this respect Priscian says, "*Sequente g vel c pro ea (n) g scribunt Graeci et quidam tamen vetustissimi auctores Romanorum euphoniae causa bene hoc facientes, ut 'Agchises, ageps, aggulus, aggens,' quod ostendit Varro, in primo de origine linguae Latinae his verbis : ut Ion scribit, quinta et vicesima est litera, quam vocant agma, cujus forma nulla est, et vox communis est Graecis et Latinis, ut his verbis 'aggulus, aggens, agguilla, iggerunt.'* In ejusmodi Graeci et Accius noster bina *g* scribunt, alii *n* et *g*, quod in hoc veritatem videre facile non est, similiter 'ageps, agchora.'"

The second important passage in reference to this point, Mr. Corssen observes, Gellius has extracted entire from the work of Nigidius Figulus, "*Inter literam n et g est alia vis, ut in nomine 'anguis' et 'angari' et 'increpat' et 'incurrit' et 'ingenuus.'* In omnibus his non verum *n*, sed adulterinum ponitur. Nam *n* non esse lingua indicio est ; nam si ea litera esset, lingua palatum tangeret."

As regards the sounds of this '*n adulterinum*' Mar. Victor. says, "*non inter m et n medium sonat 'unquam' et 'nonnunquam' et similia, sed inter n et g.*" This sound of *n* was represented by Accius by the letter *g*, but his annotation has never been generally adopted, as little as the doubling of the vowels, to express, that they are long. Marius Victorinus defines this sound as an intermediate one between *n* and *g*, just as we represent the French nasal *n* by *ng* for beginners.

In inscriptions of the latest times we find the words *pricipi, coque* [rendos], where the non-expression of the guttural nasal sound indicates, that the ear no longer recognized in it the proper sound of the letter *n*. The same sound before *g* and *x* (*c s*), is found expressed by *nc* in inscriptions dating from the time of the empire, e. g. *conjuncx, juncxit, extincxit, nuncquam*; and in a still later inscription by the letter *c* alone, in *nucquam*.

Finally, as the nasal guttural *n* before *c*, *g* and *q*, had been

perfectly developed in the Latin language, at an early period, as well as Accius' mode of spelling it, Mr. Corssen explains by this, *ecce* for *en-ce*, *ec-quis* for *en-quis*, *ec-quando* for *en-quando*, as we find *nucquam* for *nunquam*.

M.

The fact that the labial *M* in different parts of the word was pronounced differently, is told us by Priscian in the following words: "*M obscurum in extremitate dictionum sonat ut 'templum,' apertum in principio ut 'magnus,' mediocre in mediis ut 'umbra.'*" Hence, in the beginning of words the letter *m* had the same strong and decided sound, with which the labial liquid is pronounced in all cognate languages. The reason why it sounded weaker in the middle of words before labials, is because the following stronger sound, pronounced in the same part of the mouth, predominated over the weaker liquid. The letter *m* was moreover weakened in the middle of words, when it was changed into a guttural *n*, before the guttural *c, g, q*, and into a lingual or dental *n* before the dentals *d* and *t*; further, when it turned into the obscure semi-vowel sound of *n* before *s, f, j*, and, finally, when it was lost entirely before vowels in the words *cum* or *com* and *circum*. Examples of this weakening process we find in the following words, *anceps*, for *amceps*, *ambceps*, *ambiceps*, *anquiro* for *ambiquiro*, *congero*, *tantundem*, *veruntamen*, *consul* and *cosol*, *confisus*, *conjux* and *cojux*; *coventionid* and *conventione*, *circuago*, *circuire*, *coagululum*, *coactus*, *coaptare*, *coimere*, *coëmpcio*, *cooptare*, etc., see Corssen, I., 107. The only words where the letter *m* remained, are *comes*, *comitium*, and *comitari*.

According to the testimonies of Cicero and Quintilian, the letter *m* in *cum* (*com*) was also weakened into *n* at the end of words, in the connection of speech, as in *cun nobis*. According to Velius Longus also in *etiam nunc* instead of *etiam nunc*; still others say that Cato wrote *an terminum* instead of *ambi* (ἀμφι) *terminum* (compare *anceps* for *ambi-*

ceps). In inscriptions, also, we find *per decen dies, tan concorde*, which *tan* was afterwards adopted in the Spanish language; and in inscriptions of the latest times, *con quo, con qua, con que, con quem, con cojugi*.

Sometimes Mr. Corssen, on the strength of the material immediately before him, raises theories which he finds it afterwards necessary to modify. For instance, he notices that Cato and other early writers (according to Verrius Flaccus,) use in the subjunctive mood *attinge[m]* for *attingam*, *dice[m]* for *dicam*, *ostende[m]* for *ostendam*, *recipie[m]* for *recipiam*, and on the strength of this he asserts that we have certain proofs, that in the Old-Latin the dropping of the sign of the person affected also the first person singular, while this evidence only proves that the letter *m* was dropped in spelling, but not necessarily in pronunciation; while he says in another place, the letter *m* may have been pronounced imperfectly, and hence deemed unnecessary to be expressed in writing. As regards the letter *e* of the subjunctive mood, in the above words, we do not regard it as being weakened from *a*, since such a thing is nowhere found, either in the Italian, Spanish or Portuguese languages, but we think it identical with the older so-called future form *dicem, faciem*. With respect to the theory of Mr. Bopp, concerning the original formation of the verbs, which is assumed as correct by Mr. Corssen (I. 109), we do not agree with him, but we hope to prove on some future occasion, that this theory, embraced by him in opposition to the Indian grammarians, who must be considered as having been more intimately acquainted with the original state of the stem-language of the Indo-European race, is not true, viz. that the letter *a* of the first person, and the corresponding letter *o* in the Greek, Latin and Old-Slavonic languages, are no part of the pronoun, but mere copulative vowels. Thus much, we think, is already proved, that the termination μ of the first person is a mere secondary and sectional formation among the Indo-European languages, for it only occurs in the Sanscrit and Zend, and in a limited

number of verbs in the Greek and Slavonic, while no trace of it is discovered in the Latin and German; also that it is a later formation, because it is only found in the present tense, and the present tense is by no means the first tense which originated in language.

In the inscriptions dating from the time of the Punic war Mr. Corssen still observes the same wavering between the retaining and dropping of *m* at the end of words; but from the time of the "Senatusconsult. de Bacchanal.," he finds it generally written and dropped only in a few cases, whence he concludes rightly, that from the time of the Macedonian and Syrian wars, and therefore from the time when the Romans had frequent intercourse with the Greeks, the pronunciation of the letter *m* became more marked; and to this we would add, that in the same degree in which the nation became more refined, and this refinement penetrated to the lower strata of the nation, all the forms of the language became more clearly defined, for language is the truest index of a nation's culture. But, in the third century after Christ, when the active political life of the Romans ceased, and in consequence of some radical changes in the Christian Church, which had become universally prevalent at that time, the whole Roman empire, both mentally and morally declined, this process was also reflected in the language of the people, and manifested itself first of all in the dropping of the letter *m* in the accusative case, which is proved by Mr. Corssen, I., 112, by a multitude of examples. From that time the letter *m* began also to disappear at the close of other words, and, we may add, to be more slighted in pronunciation, e. g. *mecu* was written for *mecum*, *septe* for *septem*, *dece* for *decem*, *aute* for *autem*, *nunqua* for *nunquam*, *pride* for *pridem*, *ide* for *idem*, *passi* for *passim*, *oli* for *olim*. How much of it still sounded in the popular mouth, we are unable to say, but from the mere fact of a grammarian of the fourth century opposing the use of the accusative and other forms without *m*, and condemning it as faulty, we are not prepared, with Mr. Corssen, to assert

that it ceased altogether to be heard. And as regards his remarks (I., 113,) that the fact of the stone-cutters no longer knowing whether the letter *m*, which they found in the older inscriptions, belonged to the accusative or ablative case, and, because that letter was void of sound and meaning to them, the fact of their using it indiscriminately for both cases (in proof of which Mr. C. adduces twenty accusatives), is a sure sign of the letter *m* being no longer heard after the close of the third century, it is our opinion that Mr. Corssen does the poor stone-cutters manifest injustice, for he has not only, thus far, regarded them as trustworthy authorities, but seems also to have forgotten that they generally only furnished the hands, while wiser heads furnished the words. We are rather inclined to believe that the stone-cutters were perfectly right in giving this preference to the accusative, for it had gradually become the general case for all the oblique forms, and, finally, after the nominative had lost its own *s* it was even used for this case, see Diez, "Grammatik der romanischen Sprachen," II., 12, where, among other examples from the collections of Gruter and Orelli, he mentions the following: *a latus*, *ab aedem*, *ab Isem*, *cum quem*, *cum conjugem suam*, *pietatem causa*, *pro salutem*, *furcepem* for *forceps*, *in curiam*, for *in curia*, *quem* instead of *cui*, *in sinu mare* (for *mares* and this for *maris*). In the Latin translation of Dositheus we find *in urbanam milita*, *in libertatem morari*, etc. The same thing is shown in the daughter-languages of the Latin, and even in the modern Greek. In the Provençale language we find *los paires*, *las maires*, in Spanish, *los padres*, *las madres*, where the accusative form of the article *los* and *las* is used both for the nominative and the accusative case, and when preceded by a preposition for all other cases; in modern Greek we find ἡ ἐλπίδα, the hope ὁ πατέρας, the father (compare also Corssen, I., 270).

Sibilants.

S.

The Latin Alphabet received its letter *s* from the Doric alphabet of Cumae. It was pronounced *sharp* in the beginning of words, and in the middle of words when preceded or followed by another consonant, with the exception of *n*, as it is still pronounced in the Romance languages. It had a *soft* sound in the middle of words between two vowels (as is still the case in the same idioms) and when followed by the weak *n*; and an *obscure* and *indistinct* sound at the end of words in the vulgar tongue, where it gradually disappeared, and whence, on this account, it was not transmitted into the Romance languages. Mr. Corssen says, that it had this last sound, at the end of words, in the first and last periods of the vulgar tongue; but as long as we have no precise historical date concerning this point, we doubt very much whether this peculiar sound was ever completely lost in the vulgar tongue, if, as the history of language teaches us, the educated portion of the Romans pronounced it, during the time of their bloom, and even at a later period.

The letter *s* was pronounced sharp in the middle of a word, when it was preceded or followed by another consonant, because the middle is changed into the smooth before *s* as in *nubo*, *nupsi*, *labor*, *lapsus*, and the letter *s* is only preserved in the word before sharp sounds, while it is thrown out before *l*, *m*, *n*, and also *d*, e. g. *ca(s)-mena*, *po(s)-no*, *corpu(s)-lentus*, *iu(s)-dex*, *di(s)-duco*, *tri(s)-remis*, *tre(s)-decim*, etc., or else is changed into *r*, e. g., *carmen*, *ornare* for *osnare*, *diurnus* for *diusnus*, *hodiernus* for *hodiesnus*. The letter *s*, on account of its sharp sound, agreed as little with these sounds, as in the beginning of words it did with *a* following *f*, e. g. *fallo* for *σφάλλω*, *fungus* for *σφόγγος*, *funda* for *σφενδόνη*, *fidis* (chord) for *σφίδη*.

As the letter *s* sounded softly between two vowels, it easily passed over in this case into *r*, e. g. *asa* into *ara*, *speres* for *speses*, or else it was dropped, e. g. *Tities* for *Titieses*, *Ramnes* for *Ramnese*s, etc. Whenever Mr. Corssen, in the middle of a word, between two vowels, finds a double *s* after a long vowel or a diphthong, he very justly separates those cases where the double *s* remains in the daughter-languages, of the Latin from those where they are reduced there into a simple *s* and thus proves that they were originally pronounced softly. According to Quintilian, at the time of Cicero and even later, they spelled a double *s* even after a long vowel, for the sake of etymology, e. g. *caussa* for *causa* from *cautia*, *cassus* for *cadus*, *divissiones* for *divisionses*. Marius Victorinus moreover mentions *aussus* for *audsus*, *fussus* for *fudus*, *odiossus* for *odionsus*, *ussus* for *utsus*, *russum* for *rursum*. Since the time of Quintilian these words were spelled with a single *s*.

Since the letter *s* at the end of words, from the oldest times, was pronounced weakly, and hence, was frequently not expressed in writing, Mr. Corssen, assumes with Mr. Bopp that an original letter *s* was dropped in words like *Numa*, *poeta*, *puer*, *vigil*. It is a mooted point, however, whether words like *poeta*, *ἡνότα*, etc., are not original stems, in which the ending *a* is a sort of article. On the other hand, although it cannot be denied that the ending *er* of the *o*-declension (II. declension) is shortened from *rus*, it nevertheless appears as if the final *r* in *puer* was formed of *s*, and as if the vowel *i* on account of the following *r* was changed into *e*, so as to seem like to the Doric *ποιρ*, for *παῖς*. The letter *s* was also dropped, at an early period, in the second person singular of the present and imperfect tense of deponent and passive verbs, e. g. *loquere* for *loqueris*, *loquere*, *loquebare*, *loquerere*. When the Romans by the wars which they carried on in the east, came into closer contact with the Greeks, that part of the nation who were nearest to them and were more immediately influenced by them began to pay more attention to the

forms of their language and to pronounce the letter *s* of the nominative case more strongly, but this innovation never penetrated deeply among the population inhabiting the country. As regards the dropping of it in the genitive of the A-and O-(first and second) declensions, we agree with Mr Corssen, but remark at the same time that this theory is not yet generally adopted, for Mr. Bopp even in the new edition of his comparative grammar, pages 184, 200, still gives the preference to the old idea of the locative taking the place of the genitive.

Mr. Corssen, I., 119, concludes from the old form *prospices* that the imperative mood originally ended in *s*, because it was formed of the *present tense*—both of these points we deny positively. We do not pretend to pass any judgment in matters connected with the first formations of the languages of the primeval people, because many centuries must have elapsed, during which these languages were continually forming, before any of their written documents could appear in the light of history, but there are, nevertheless, certain points which, we think, no unbiased mind will deny. As far as we can see, language like everything else, in the beginning was simple, and as it unfolded itself, in the course of time, became more perfect and as it were articulated. This point we ought to hold fast and not to yield up to any authority, howsoever weighty. If Mr. Ewald tells us that the imperative mood in the Semitic languages is formed of the future tense, and Mr. Bopp, that in the Indo-European languages it originates in the present tense, by dropping in the active voice the personal ending, we think we are fully justified in asking them: Gentlemen, who has told you so? Do not the first monuments of language rather teach us otherwise? The first form of the verb was undoubtedly the *ao-rist*, presenting to the mind the idea of some fact or some act completed. The second form of the verb, required by language, was that which demanded the doing or repeating of such an act or fact. As this form, in the first place, referred to single, concrete

cases, it had necessarily to be short, and as the person was present, it did not need any mark for the person; hence the imperative mood of the Semitic languages, of the Chaldee, Syriac, Arabic and Hebrew is the shortest form of the verb, and in the second person which we consider the primitive formation is found without any mark of the person; the same is the case with the German, Persian, Old-Slavonic and Latin, and the greater part of the Greek, Sanscrit and Zend, so that the endings *s*, *ṣ*, and *d'i* wherever they may be found, must be regarded as later additions, and mere sectional formations. Mr. Bopp says, § 718 of his Comparative Grammar, that the second person singular of the Imperative mood in the first general conjugation of the Sanscrit language (which corresponds to the Greek conjugation in *ω*, to the four Latin, and the strong conjugation in the Germanic tongues), differs from the second general conjugation (which corresponds to the Greek in *μ*), by losing the sign of the person in the active voice, so that, for instance, the verb *bara*, to bear (Zend *bara*) closes with the characteristic letter of the class to which it belongs, viz., *a*. He furthermore says, that this loss of the sign of the person seems to date to the remotest antiquity, inasmuch as in Greek, too, we find *φίρε* instead of *φίρεῖς*, and in the Latin language *leg-e*, *am-a*, *mon-e* and *aud-i*, in all of which cases the sign of the person has been dropped. Of the Germanic strong verbs, he says, (§ 719), that in the second person singular of the imperative mood they dropped the characteristic class-vowel, without being reduced, however, to the mere root of the verb. We consider ourselves fully justified in asking, how does Mr. Bopp know, that these forms ever possessed the personal endings, and afterwards dropped them? Does it not seem natural, that these short forms should have existed originally, and that the endings were added afterwards? Who has informed Mr. Ewald that the Hebrew imperative has been formed from the future? Does it not seem more natural that the future is a more complete form of the imperative mood, inasmuch as the *jussive* signification of the future,

which is the shortest form, (and corresponds to the imperative mood,) is found in all Semitic languages, and from this shortest form are generated all modifications of the subjunctive mood. The imperfect or future tense of the Semitic idioms, however, is as far from being a primitive formation, as the present tenses of the Indo-European languages, since they do not express any act or fact *completed*, but only as being done; these last, moreover, present manifest traces of external accretions, as $[\gamma^i]\gamma\nu\omega[\sigma x]\omega$, $\lambda a[\mu]\beta[\alpha\nu]\omega$, *co-gno[sc]o*, *f[n]go*, *ru[m]po*, *clar[esc]o*. From what we have advanced above, it certainly appears, that without even relying upon the logical improbability of a primary formation of the present tense, we are not authorized to maintain that the imperative mood has been formed by dropping the personal ending of the present tense, inasmuch as in the majority of the original formations of the stem-languages of the Indo-European race the personal suffixes are almost entirely wanting in this mood; although we are perfectly willing to admit that after the present tense had once been formed, a later form of the imperative mood in later ages, was really obtained from it, as in the French, where together with the original form *parle*, *va*, etc., in the imperative mood, we find likewise *parles-en*, *parles-y*, *vas-en*, *vas-y*; which forms are obtained from *tu parles* and *tu vas*. The letter *s* in these forms is usually regarded by the grammarians as an addition for the sake of euphony, but we do not think so, since the letter in the above cases is embodied in the verb itself, and not separated from it by a *trait-d'union* as in *parle-t-il*; however, the very letter *t* in this last form was originally a part of the termination of the verb. As regards the word *prospices* itself, which caused this digression, it does not at all follow that it is found in the imperative mood, for it may just as well be the second person singular of the future tense, used as an imperative, without the suffix *i*; and MR. CORSSSEN, himself, (II., 147,) shows that this suffix *i* has been omitted in other instances, viz., *conven-at* for *conveniat*, *even-at* for *eveniat*, *pervenam* for *perveni-*

am, and *perven-at* for *perveniat*. Thus even in the first conjugation we find *lav ere* for *lav-[a]-ere*, and more so in the second as *terg-o*, *terg-e-o*.

In monuments, from the oldest times to those of Cicero and Catullus, we meet with elisions of the letter *s* in the nominative case, Mr. Corssen, therefore is perfectly right in saying, that if the oldest poets neither pronounced nor wrote the final *s* as a full consonant, and denied its right to make a vowel long by position, when followed by another consonant in the beginning of the next word, they did not take a poetical license but followed the general pronunciation of the people; and Cicero himself who calls this elision of the final *s* before an initial consonant of the next word *subrusticum*, softens his remark by the prefix "*sub*." To this we add, that in the inscriptions of the later times of the empire, when the culture and refinement of the town people was on its wane, and they gradually sank down to the level of the rustic population, the letter *s* of *o*-stems, in many cases began no longer to be expressed in writing, as in the old Latin, for instance in *filiu* for *filius*, *Longinu* for *Longinus*, *Sepiu*, *Mariu*, *positu*, etc.; (compare the dialect of the Sardinian island.) This furnishes a proof that in the later vulgar tongue the final *s* was no longer heard like the final *m*. Only in inscriptions dating from the latest times of the empire, the letter *s* ceased to be expressed also in cases other than the nominative of *o*-stems, as in *securitati* for *securitatis*, *incomparabili* for *incomparabilis*, *Jovi* for *Jovis*, *nepoti* for *nepotis*, *aetati* for *aetatis*, *Isidi* for *Isidis*, *religioni* for *religionis*, *Nicomedi* for *Nicomedis*, *creati* for *creatis*, *qui* for *quis*, *ani* for *anis*, *anni* for *annis*, *saltuosa* for *saltuosas*, (I., 120.) Still, even in inscriptions of these latest times, the letter *s* of the genitive singular continued to be written *Caesares* for *Caesaris*, *campestres* for *campestris*, and some other forms, and thus Mr. Corssen concludes that these sounds had not yet altogether disappeared from the mouth of the people. The Umbrian language goes still farther than the Latin in casting off the final *s*, for it rejects it in almost all

cases except in the genitive singular and in the nominative, dative and ablative plural of the *a*-declension, and in the dative and ablative of the consonant (third) declension, where the preceding vowels *a*, *e* and *u* seem to retain the letter *s*, (I., 121,) if we do not prefer to suppose, that it originally had not an *s* in these cases.

Z.

The letter *Z* according to Varro and Velius Longus was found in the oldest Latin alphabet and in the Carmen Saliare. The precise time when it became obsolete, is not known, nor can we positively say, how it originally sounded.* In the Umbrian idiom *z* had two different sounds, a compound or double one = *ts*, at the end of the words, as in *pihaz* Lat. *piatus*, and a medial or soft one as in *menzarum*, Lat. *mensarum*, (cfr. Aufrecht and Kirchhof U. Sp. I., p. 108.) After the letter *n* it has according to Mr. Corssen, the same soft sibilant sound, which we have found above in Latin *s* after *n*. In the Oscan, it sounds at the end of the words like *ts*, as in *horz*, Lat. *hortus* (Mommson, U. D., p. 128, 139, 140.) In the middle of the words it was, like the Umbrian, a soft sibilant, and expressed a transition from the soft *s* to *r* in the genitive plural of the *A*-stems [1 declension]-*azum* = *asum*, Lat. *arum*. Which of these two different sounds of the Italic dialects the Latin *z* originally had, we cannot positively decide, but it is very likely, that it had the simple and soft, not the double one of the Greek, since it had separated from its sister-idiom, before this underwent its zetacistic changes and continued for many centuries without exhibiting traces of similar alterations. We know, that the Latins in the times of Plautus

* For we have no more right to presume from the identity of the sign of the Greek ζ and the Latin *z* the identity of their sound than we have to claim for the Latin *f* the sound of the Greek digamma, because the Latins have adopted the Greek sign for their peculiar Italic sound.

and Pacuvius expressed the Greek ζ by *s* in the beginning, and by 'ss' in the middle of words after a short vowel, as *Saguntum*, *sona* for *zona*, *badissas*, *malacisso*, *Atticisso*, *comissor*, *cyathisso*, and even at a period still later we meet with *ss* in the place of ζ in *patrisso*, *pytisso*, *massa*, *crotalisso*, *hilarisso*, (Schneider Lat. Gr. I., 385, and according to this analogy are formed *Graecisso*, *tablisso*. From the fact that the single *s* in the beginning and the double *s* in the middle of the words expressed the same sharp sibilant, Mr. Corssen concludes, that to the ear of the ancient Romans the sound of the Greek ζ came nearest to their own sharp sibilant. But when the sign of the *z* at the time of Cicero was re-introduced into the Latin alphabet, it was only employed in foreign and mostly Greek words, and it was not until the later empire that the assibilated *d*, *t*, *c*, *g*, and *j* were expressed by the sign of the *z*. See our excursus on the zetacism and the pronunciation of the Greek and Latin *z*, in the appendix.

X.

The letter *X* is included by Mr. Corssen among the sibilants, because in the course of time it entirely degenerated into them. We have seen above, in our article on the alphabet, that after the time of the Gracchi *xs* was sometimes written instead of *x*. This mode of spelling *x* although it never became prevalent, still shows that the sibilant was the predominating element; hence before consonants, the guttural element of *x* was entirely lost, and nothing remained but the sibilant *s*, e. g. *sescent[as]* for *sexcentas*, *Sestius* for *Sextius*, *praetestati* for *praetextati*; and the remaining sibilant itself was dropped before those consonants with which it did not agree, viz., before *d*, *n*, *m*, *v*, as in *sedecim* for *sexdecim*, *se-ni* for *sexni*, *se-mestris* for *sexmestris*, *se-vir* for *sexvir*. This explanation Mr. Corssen finds confirmed by the subsequent history of the letter *x* in the mouth of the Roman people, for in inscriptions dating from the beginning of the fifth century

we find *visit*, *bissit*, *bisit* and *viset* for *vixit*, *unsit* for *unxit*, *obstrinserit* for *obstrinxerit*, *coius* for *cojux*, etc. From these examples we see, that at this time the guttural element of *x* had entirely disappeared from the popular pronunciation, in the middle of a word, and was reduced to *s* and *ss*, so that the letters *x* and *s* were no longer accurately distinguished, and frequent mistakes were made in their use. So we find *xancto* for *sancto*, *milex* for *miles*, *tigrix* for *tigris*, and on the other hand *frassinus* for *fraxinus*, *tossicum* for *toxicum*, *trissago* for *trixago*, *cossim* for *coxim*. [In the daughter-idioms of the Latin, we either find the letter *x* retained, as in French, or else changed into the guttural aspirate, as in the Spanish. In the Portuguese it remained in Latin words, but was changed into *ss* in Greek; moreover, as an *initial*, in some words not Latin it is pronounced *sh*, and as a *final*, in some Latin words, *fs*, e. g. *calix*=*fs* (pronounce *califs*]. In the Italian language we find everywhere *s* or *ss* for *x*, e. g. *saggio* for *exagium*, *massimo* for *maximo*, *spiegare* for *explicare*, *straneo* for *extraneus*, *vissi* for *vixi*, *esempio* for *exemplum*, *sasso* for *saxum*. — In some instances it is entirely dropped, as in *tela* for *texela*, *ala* for *axilla*, *mala* for *maxilla*.

Semi-Vowels.

I or J.

The letter *I* in the Latin language was either a vowel or a consonant. The consonant *I* we write now with the distinctive sign *J*. As an *initial*, before a vowel, it was a consonant, e. g. in *Juno*, *Jupiter*, (Prisc. 1, 18), and also as a *medial* in compounds, e. g. in *abjudico*, *adjungo*, *conjectus*. Sometimes the semi-vowel *j* is dropped before *i*, as in *abicit* for *abjicit*, *obicit* for *objicit*, and *subicit* for *subjicit*; but this is only done in order to avoid the meeting of two similar sounds. The simple sound of *j* also remains in compounds, where the prefix ends in a vowel, as in *ejuro*, *ejectus*, *dijudico*, *pejero*

for *perjuro*, etc., but it is rejected when followed by *i*, as in *eicit*, *reicit*, *proicit*, *coicit*. As regards the quantity of the vowel before *j* it remains short as before any other consonant, e. g. *bijugus*, *quadrijugus*, *trijugus*, *altijugus*.

As a *medial*, in uncompounded words between two vowels, where, according to Quintilian, Cicero wrote a double *i*, the semi-vowel *j* must have had a different and indeed a sharper sound, for Priscian says VII., 19, "*Solebant illi non solum in principio, sed etiam in fine syllabae ponere i loco consonantis, idque in vetustissimis invenies scripturis, quotiens inter duas vocales ponitur ut 'eiius, Pompeiius, Vulteius, Gaiius' quod etiam omnes, qui de litera curiosius scripserunt, affirmant.*" The method of writing *II* was thus customary, according to Priscian, in the oldest manuscripts, and, moreover, was approved by Cicero and all other authorities in grammar; hence also it is found in inscriptions, as in *Pompeiius*, *Opetreiiæ*, *Sabineiius*. In the Spanish inscriptions of Salpensa and Malacca we, likewise, find *eiIus* together with *elus*, *eilusdem*, *cuiIus*, *cuiIusque*, and *maiIorum* together with *maIoris* and *maIorem*, with this exception that in the place of the second *i* is written the tall *I*.

According to Mr. *Aufrecht*, wherever there is found, in the middle of a word, before *j* a long vowel, it is either long by nature, or else it was made long by the rejection of a consonant, as in *Acteius* (I., 129). The original form of this suffix in the Italic tongues was—*aijo*; from this, by the blending of the diphthong, were obtained *aejo*, *eijo*, *ejo*, *ijo*, and by the dropping of *j*, *aio*, *aeo*, *eo*, *io*, *eo*. Thus we find the Osc. *Pompaiians*, Lat. *Annaei*, *Pompeia*, and Osc. *vereiiai*, and the Latin *Anneius*, Osc. *vereias*, Umbr. *Museiate*, *Kureiate*, and the Lat. *Opetreius*, *Sabineus*. According to Mr. *Corssen*, the long vowel before the genitive ending *ius* in *ejus*, *hujus* must be explained likewise, either by the blending of two vowels, or the rejection of a consonant. Still as these forms can also be explained some other way, and neither is perfectly clear, he leaves this question undecided, (I., 129).

According to Mr. Corssen (I., 130,) the preceding syllable is made long by the elision of *g*, in

mājor, *majus* for *magius*, *Majus* for *Magius*, *pulejūm* for *pulegium*, *āio* for *agio* (Sanscr. *ah*, *dicere*), *mējo* for *migio*, (*mingo*, *μίγω*), *Sēja* for *Segia* (comp. *seges*) ;

by the elision of *v* before *j*, in *Gājus* for *Gavius*, Osc. *Gaaviūs* ;

by the elision of *r* in *pějero* for *perjero* (comp. *perjurium*) ;

by the elision of a simple *s*, or of an *s* with a preceding *n*, in *dijudico* for *disjudico*, *trājicio* for *transjicio* ;

by the elision of *x* or *cs*, in *sėjugis* for *sexjugis*.

Thus, according to Mr. Corssen, we would also, have to give up the idea, that in the words *bajulus*, *Bajae*, *cajare*, *fejunus*, *Majalis*, *pějor*, *Trajanus*, the preceding vowel was made long by the letter *j*.

As regards the sound of *j* in uncompound words, between two vowels, Velius Long. says, "*Atque ipsa natura j litterae est, ut interjecta vocalibus latius enuntietur, dum et prior eam asserit et sequens sibi vindicat.*" It was thus a lengthened sound, which, on this very account, was pronounced more softly and more like a vowel, and which, by the Greek, was represented by a simple *ι* as in *Γάιον*, *Τραϊανός*, *Μεσσηνληϊαν*, *Πομπηϊα*, etc., (I. 131). Greek words which became domesticated in the Latin language, were pronounced with the soft, broad or lengthened *i*, as *Achaja*, *Ajax*, *Grajus*, *Maja*, while others that only occurred in the higher poetry of the Romans, retained the sharper Greek pronunciation, as *Aglaiā*, *Ceiūs*, *Laiūs*, *Naiās*, *Pleias*, *Teiūs*.

The letter *j*, as an *initial*, in simple words, and in the second member of compounds, according to Mr. Corssen (I., 132), was pronounced like the German *j* [in *Jahr*, or *y* in *year*] ; but, inasmuch as by virtue of the position of the organs of speech in its pronunciation, especially of the tongue, it is very nearly related to the rough sibilant (*sh*), it had in the beginning [?] a sibilant admixture, which, at an early season, assibilated the letters *c* and *t*, and afterwards *d*

and *g*. Moreover, it exercised on all preceding consonants a dissolving and annihilating influence. Thus, in *Jovis* instead of *Diovis*, and *Janus* instead of *Dianus*, it destroyed the letter *d*, in *major* and *ajo* the letter *g*, in *Gajus* the letter *v*, in *pejero* the letter *r*, in *dijudico* the letter *s*, and in *sejugis* the letter *x*, and [we may add, by the preparative intermediate sound of *ds*, *ts*, *z*, as in *κοζου* for *cujus*, and *Zesu* for *Jesu*, it was changed in the Italian into the double sound *dsh*, which, in the French and Portuguese languages was reduced into *sh*, while in the Spanish it was only weakened into the guttural aspirate.]

V.

Cicero classes the semi-vowel *v* among the labial consonants, and Priscian says, "*Vau id est digamma.*" In the older Greek writings the Oscan *v* was represented by *F*, but in the later writing, in proper nouns, partly by *B* and partly by *Ov*, and sometimes by both at the same time, and in Latin appellatives by *B* only, e. g. *Οὐάβρων* and *Βάβρων* for *Varro*, *Ουάλης* and *Βάλης* for *Vales*, *Ουαλεντία* and *Βαλητία* for *Valentia*, *Ουεργίλιος*, *Βεργιλία* and *Βιργιλία* for *Virgil*, etc. ; *Μηουβιανός* for *Mevianus*, and *βέρνα* for *verna*, *σέρβος* for *servus*, *βεστιάριον* for *vestiarium*, *κόμβεντος* for *conventus*, etc., (I., 133.)

As an *initial*, *v* or *F* was preserved in the Latin, whilst it was lost in the Greek, e. g. *vomo* and *ἐμέω*, *voco* and *ἔπω*, *volvo* and *εἴλω*, *vinum* and *οἶνος*, *viola* and *ἰον*, *vitulus* and *ιταλός*, *ver* and *ἦρ*, *vespera* and *ἑσπέρα*, *Vesta* and *ἑστία*, *vestis* and *ἑσθής*, etc. On the other hand, it was elided before consonants in the Latin language, while the Greeks, in the Aeolic and Doric dialects, according to Messrs. Ahrens and Dietrich, preserved it in *β* which was put in the place of the digamma, e. g. *radix* and *βρίζα*, *rosa* and *βρόδον*, *rigo* and *βρέχω*, *rugio* and *βρυχάομαι*, (I., 134.)

As a *medial*, it throws off a preceding *d* and *g*, as in *bellum* for *dvellum*, *duellum*, *bis* for *vis* from *dvis*, *viginti* for *dvi-*

ginti, *fivere* for *figvere*, *figere*, etc. With regard to Mr. Corssen's theory that the letter *v* casts off also a preceding *f* in the perfect tense, thus that *proba-vi* stands for *proba-fui* and *mon-ui* for *mone-fui*, we cannot agree with him, as there is not the slightest occasion of such a supposition; for in the Umbrian language we find *f* between two vowels in the place of the Latin *v*, also in other words. Moreover, the letter *u* in *fui* does not at all express the past tense, as has been very justly observed by Prof. Harrison, and we may add, that even, if the termination *vi* or *ui* is derived from the older form *fuvi*, the syllable *vi* in this word is as much a perfect-ending, as in the word *flevi*, and its origin is thus by no means solved; this we shall endeavor to do in some other place.

Mr. Corssen continues, (I, 134), the reduction of *v* into *u*, after consonants, is of very old date; thus we find *tui* and *tuus* for Sanscr. *tvam*, *sui* and *suus* for Sanscr. *svas*, *suavis* for Sanscr. *svadus* [as Germ. *süss* for Engl. *sweet*.] Thus also *vo* is changed into *uo* in *vacuus* for *vacvus*, *perpetuus* for *perpetvus*, *relicuus* for *relicvus*, *assiduus* for *assidvus*, *perspicuus* for *perspicvus*, further in *caeduus*, *exiguus*, *vidua*, *fatuus*, *mortuus*, *ingenuus*, while it is retained after *r* and *l* in *alvus*, *arvum*, *calvus*, *larva*, *salvus*, *ervum*, *malva*, *acervus*, *silva*, *urvus*, *ulvus*, *curvus*. Hence Mr. Corssen holds that resolutions such as *dissolūo*, *evolūam*, *silūa*, *larūa*, *miliūo*, are artificial productions of higher poetry, which did not take their origin in the language of the people.

Lastly the letter *v* is even elided after *d*, *t* and *s*, as has been done in most ancient times after *t* and *s* in *te* and *tibi* together with genitive *tui*, Sanscr. *tvam*, in *se* and *sibi* together with *sui*, Sanscr. *svas*; just as in Greek the digamma is rejected after *σ* originating from *τ*, as in *σού*, *σού*, *σέ*, *σός*, and after the rough breathing which was softened from *σ*, as in *οἶ*, *οἶ*, *ἔ*. In Ennius, also, we find *sis* for *suis*, and we hence conclude that at his time the forms *sus*, *sa*, *sum* were in use instead of *suus*, *sua*, *suum*. The letter *v* is elided in a similar manner

in *savium* for *suavium*, *quattor* for *quattuor*, *quatuor*, *sua-*
dere for *suadvere*, *suavis* for *svadvis*, Sanscr. *svadus*.

The letter *v* also is resolved into *u*, whenever, after rejecting a vowel, it comes into contact with a consonant following, and the diphthong which is formed by this means, in some cases, is even found to coalesce into a single vowel, e. g. *gaudeo* for *gavideo*, from which there was an ancient perfect *gavisi*, which was afterwards superseded by *gavisus sum*, *auceps* for *aviceps*, *auspicium* for *avispicium*, *aucella* for *avicella*, *avicula*, *Opiter* for *Aupiter*, *Avipater*, *Opetraiius*, *Opetreius*, etc., (I., 136.) Thus also, according to Cicero, we find *cauneas* - in the mouth of the people, for *cave ne eas*. In a similar manner, *ov*, after rejecting the following vowel, is resolved into the diphthong *ou*, which finally passes off into the single vowel *ū*, e. g. *nuper* for *novumper*, *Nounas* for *Novenas*, *nunc* for *novumce*, *Jupiter* for *Jovi[s]piter*, *Nouceriam* for *Noviceriam*, *Juno* for *Jovino*, *jucundus* for *jovicundus*, *prudens* for *providens*, *nundinum* for *noundinum*, *novendinum*, *upilio* (*opilio*) for *ovipilio*. In a like manner we find *prug-*
nus (*priugnus*) for *privignus* (*privigenus*).

From these facts Mr. Corssen concludes, that in case the letter *v*, as a *medial*, where it comes into contact with a consonant, had had a soft vowel-like sound, this consonant or the letter *v* itself would not have been so often rejected. The letter *v*, therefore, as an *initial*, and also as a *medial*, whenever it came next to a consonant, had the same consonant-like sound, as the English *v* and German *w*.

In the middle of words, between two vowels, the letter *v* is liable to be dissolved by them, like the letters *h*, *s* and *j*. It is simply dropped, as in the following words, *bovm* for *bovum*, *Gnaeus* comp. *Gnaivod*, *petii* for *petivi*, [we learn from the manuscripts that the letter *v* is seldom omitted in the first person sing.,] *redierint* for *rediverint*, *fui* [for *fuvi*], etc., (I., 137, 138.) The dropping of *v* causes that of the following vowel, e. g. *praes* for *praevides*, *praeco*, for *praevo*, *nolo* for *nevolo* *malo* for *mavolo*, *commorunt* *commoverunt*,

aetas for *aevitas*, *dūtor* for *divītor*, *vīta*, for *vīvīta*, *nomus* for *novimus*, *obliscar* for *obliviscar*.

In the later vulgar tongue this process of softening and destroying the letter *v*, between two vowels, was carried still farther, as is shown by the following examples from the inscriptions, viz. : *Faonius* for *Favonius*, *fluīum* for *fluvium*, *Flaus* for *Flavus*, *Bataus* for *Batavus*, *paimento* for *pavimento*, *aunculus* (*onculus*) for *avunculus*, *Juent.* for *Juven-tius*. Observe also the following forms of the perfect tense in the *a*-conjugation, which are similar to the Italian, but have originated in the Latin language itself, viz. : *laborait* for *laboravit*, *probai* for *probavi*, *probait* for *probavit*, *probāimus* for *probavimus* ; [there is this distinction, however, that in the Italian language, in the third person singular, the letter *v*, instead of being rejected, is changed into *u*, and the diphthong *au* is, afterwards, contracted into *o* ; the last syllable *ū*, afterwards, is dropped, and instead of lengthening the vowel into *āmo*, as is usually the case, the letter *m* is sharpened and we read *ammo*].

Mr. Corssen, however, is perfectly right in concluding from these facts, that the letter *v* between two vowels, sounded more softly and more like a vowel, than in the beginning of a word ; thus, that it sounded more like the English *w* than *v*.

Vowels.

A.

Mr. Corssen says, the vowel *A* is the fullest, loudest and noblest among the vowels, because in its pronunciation, the air, issuing from the breast and larynx, passes out with the greatest freedom and fullness, and with the least obstruction, through the widely opened cavity of the mouth, *patulo maxime ore*, as Quintilian has it. In its pronunciation the muscles of the larynx only are in decided activity, while the

opened lips are passive, and the tongue is at rest. The vowel *A* therefore among all consonants is most intimately related to the gutturals, [of this relationship Mr. Corssen, does not furnish any proof]. Neither the declaration of any ancient author, nor any other trace, leads us to suppose, that in the Latin language, when the letter *A* was written, there was ever pronounced any other sound than the pure, full *a* in *far* or its corresponding short sound. That the short as well as the long *a* had the same pure *A*-sound, is proved also by the verses of Lucilius, Ter. Scaur., p. 2255.

'*A*' *primum longa, brevis syllaba, nos tamen unum*
Hoc faciemus, et uno eodemque ut dicimus pacto,
Scribemus: 'pacem, placide, Janum, aridum, acetum,'
 'Ἀπεῖς, Ἀπεῖς, Graeci ut faciunt.

The vowel *A*, under the influence of neighboring consonants, and of the stress or arsis, was weakened, on the one hand, into *o* and *u*, and, on the other, into *e* and *i*, and, in the course of time was spelled with these vowel-signs. Mr. Corssen, together with Mr. Dietrich, is perfectly right in assigning as a reason for this process of weakening the method of accentuation, formerly in use among the Romans. Whenever they, by composition, or reduplication, added a new syllable to a word, by which its signification became more marked, or more narrowly defined and intensified, they usually laid the stress upon these syllables, and not only in words, such as *concepit, prohibet, Juppiter, pepulit, cecidit, fefellit*, but also in words like the following, viz., *defendi, inermis, diluvium, [pepulerit, pepulisset]*. For the same reason, the final stem-vowel of the second member of compounds was, in a like manner, sometimes weakened into *i*, the lightest and most slender of the vowels. Thus *a* is changed into *i* in *bilinguis, elinguis* from *lingua*, *imberbis* from *barba*, *compernis* from *perna*, *biformis, triformis, multiformis* from *forma*, *subtilis* from *tela*; an original *o* is changed into *i* in *exanimis, semianimis* from *animus* (ἄνεμος), *biennis, triennis* from *annus* (annos), *bilustris* from *lustrum, tri-*

membris from *membrum*, *biremis*, *triremis* from *remus*, *insignis* from *signum*, *inermis* from *arm[um]*; *u* is changed into *i*, in *bicornis*, *tricornis*, *unicornis* from *cornu*.

In unaccented syllables, either before or after the syllable which had the stress, in the *Old-Latin*, the vowel *a* was changed into *o*, and afterwards into *u*, e. g. *vocivus* for *vacivus*, *vocuus* for *vacuus*, *vocatio* for *vacatio*, *vox* (*voc-s*), Sanscr. *vācas*; Sanscr. *nāvas*, Latin *novus*, Gr. *νίος*, 'Εξάβη, *Hecoba*, *Hecuba*, 'Ηρακλῆς, *Hercoles*, *Hercules*. It was changed into *u*, before the labials *p*, *b*, *m*, *v*, e. g. *aucupor*, *aucupium*, *occupio* and *occupo* from *capio*; *derupio*, *surrupio*, *surruplus*, and *eruptus* from *rapio*; *contubernium* for *contabernium*, *condumnare* from *damnare*. It passed over into *u*, before a simple *l*, or *l* followed by another consonant, e. g. *insulio*, *desulio*, *dissulio* from *salio*, *exsulto* for *exsalto*, *insulsus* for *insalsus*. *A* passed over into *u* from *o*, in *concutio* for *conquutio* from *conquutio*, *conquatio*.

A, when it is the stem-vowel of the second member of compounds, and when it closes a syllable, is weakened into *i*, e. g. in *accipio* from *capio*, *inhibeo* from *habeo*, *confiteor* from *fateor*, *displiceo* from *placeo*, *prodigus* for *pro-agus* from *ago*, *recino* from *cano*, *eminus* from *manus*, *inimicus* from *amicus*, *enim* and *etenim* from *nam*. Before *l*, Mr. Corssen says, the vowel is only weakened into *u*, and in words like the following, viz., *dissilio*, *insilio*, *exsilium*, *domicilium*, *supercilium*, *upilio* for *ovipilio* (from *pal* = to pasture, Greek *πάλ*—in *αἰπόλος* = *αἰγυπόλος* [*βουπόλος*] and not *βούπολος* as Mr. Corssen has it], the letter *u* has been assimilated into *i* by the *i* of the following syllable. To this we would add, that this sound of *i* is avoided, whenever the *i* of the following syllable is preceded by *d* or *t*, e. g. *perpetior* instead of *perpitior* from *patior*; *aggredior*, *congregior*, *progredior*, *regredior* for *aggridior*, etc., from *gradior*, *defetigo* instead of *defitigo* from *fatigo*, *defetiscor* for *defitiscor* from *fatiscor*: that this is the reason, we see from *fateor*, *lateo*, from which unhesitatingly are formed *confiteor*, *pro-*

fiteor, *delitesco*; thus, in order to explain the letter *e* in *ingredior*, etc., there is no need to have recourse to the retro-acting influence of the liquid *r* (which never exists), as is done by Mr. Corssen (I., 317). As regards the letter *i* in *infittiae* from *fateor*, *i* has been retained, because it had previously been adopted in all other compounds. In order to avoid the repetition of two *i*'s, the first *i* is also changed into *e*, before *c*, in *depeciscor* from *paciscor*, and *imbecillus* from *bacillus*, *baculus*.

The short *e*, however, is used regularly instead of the short *i*, in unaccented syllables, before *r*, e. g. in *aequiperare* for *aequiparare*, *vipera*, according to Mr. Corssen, for *divipera* [to us it seems more natural to derive it from *vivipara*, *vivpara*, *vipera*,] *puerpera* for *puer-para*, etc., (I., 314-316.) Before the sibilant *s*, *a* is changed in unaccented syllables into *i*, e. g. *sem-is semissis*, from *as*, *assis*.

A is weakened into *e* in a close syllable, before one or two consonants, e. g. *ambiegnus*, *ambegnus* from *ambi* and *agnus*, *peregrinus* from *ager*, *consecro* from *sacer*, *ascendo* from *scando*, *impertio* from *partio* [*expers* from *pars*,] *aspergo* from *spargo*, *confercio* from *farcio*, *tubicen* from *cano*, *condemno* from *damno*, *biennium*, *sollenne*, etc., from *annus*, *refello* from *fallo*, *ineptus* from *aptus*, *anceps* for *ambiceps* from *caput*, [*princeps* from *capio*,] *remex* from *remum agere*, *bes*, *bessis* from *as*, *assis*. *Praefiscine* from *fascinum*, and *semis*, *semissis* from *as*, *assis* make an exception and change *a* into *i*.

A long is changed into long *e* in *anhelare* from *halo*.

A long, in the old Latin, has been weakened into *a* short, in the nominative of the *a*-declension, as Mr. Corssen (I., 330. 331), has shown in a number of examples, and, at a still earlier period, the ending *am* of the accusative case has been shortened; of the accusative case there is, however, no longer any trace left (I., 367.) The letter *ā* was, also, shortened in two ablative adverbs, viz.: *contra* and *ita*, and by later poets, in numerals ending in *a*, viz.: *triginta*, *quadraginta*,

(I., 131. 132.) As regards the vowel *a* of the *a*-conjugation, it continued long, even in *dā*, but was shortened in *dāt*, *dābāt*, as early as the time of Plautus. In the iambic form *roga* it was shortened by Plautus, as in the final syllable of iambic forms, (I., 332.)

Vowels, originally long, regularly became short, when in the final syllable they were immediately followed by a *final t*. The older poets partly preserved these long vowels, and some traces of them are found even in the poets of the Augustan age, viz. : Virgil, Horace and Ovid.

Cum clamore Gyas revocabāt: Ecce Cloanthum.

Nusquam amittēbāt, oculosque sub astra tenebat, Aen. V., 853. See also *erāt* in Horace, Sat., II., 2, 47, and several other passages. That the letter *a* in *bāt* of the imperfect tense was originally long, can be seen in the forms *bās*—*bāmus*, *bātis*. According to Bopp, *bā* is to be derived from *bava*, and *bām* from *a-bhavam*, from the root *bhu-*, Lat. *fu-*. The long *ā* in *erās*, *erāmus* is not yet sufficiently explained, (I., 349). The vowel *a* of the third person singular subjunctive present is, also, found long in two places in Plautus, and in one in Terence and Horace, Sat. I., 5, 90; however it had been shortened already by Plautus in words of two syllables, viz., *ēāt*, *fērāt*, (I., 349). The long *ā* in the subjunctive mood, which corresponds to *η* in Greek, and *ya* in Sanscrit, as Mr. Corssen observes (I., 349. 250.), thus dates back to the remotest antiquity. In the passive voice, also, before *r*, the letter *a* of the present subjunctive is still found long in Plautus, and in one place in Ovid, however only in the arsis, Met., VII., 51, *ferār*.

The vowel *a* was also shortened in neuter nominatives in *ar*, derived from adjectives, and, likewise, in the Punic name *Hamīlcar*, (I., 561); and in the nominative of the nouns formed of the suffix *ali*, after dropping the letter *i*, as *cervical*, *animal*, *Baccanal*, etc., and also, in the Punic names *Hannibal*, *Hasdrubal*, *Adherbal*, *Maharbal*, while Ennius and the older poets still scanned *Hannibālis*, etc. From

the nominative case this process of shortening entered all the other oblique cases, (I., 366.)

Contrary to the rule, the letter *q* appears shortened in *rogān* and *rogās*, (I., 367.) In olden times even the verbal forms in *am* are found shortened, as in *tegam*, *audiam*, *eram*, *tegebam*, *texeram*, (I., 368.) A long is also found shortened in *dābam* from *dāre*, *nātare* from *nāre*, *lābare* from *lābi*, *ācerbus* from *ācer*, *Grādivus* and *Grādivus*, (I., 371.) An unaccented *a* appears shortened in the a-declension, whenever it is followed by another vowel as in *viāe*; likewise, when it has the accent and is followed by another vowel, as in *āis* and *āit*, together with *āis* and *āin*, (II., 158.)

As regards the ten verbs of the a-conjugation which, in the perfect tense, have *ui* and not *avi*, Mr. Corssen's explanation appears to us too artificial, and we wonder that, while in treating on the verbs *son-are* and *ton-are*, he seemed to be on the right track, by tracing them back to the simple forms *son-ere* and *ton-ere*, he did not carry his analogy further, and assume the same original forms in the case of the remaining eight; for no one would have objected to his assertion, that the letter *a* of the a-conjugation, as well as the letters *e* and *i* of the other contracted conjugations, do not belong to the stem, but are suffixes which must be cast aside, in order to arrive at the proper verbal stems. The suffix *a* of the a-conjugation, for the most part, is contracted of *aja* (*aya*), and indicates a making, causing or effecting of the stem-signification. After arriving at the simple stem, one of the various endings of the aorist (or whatever you may call it,) which the Latin language acquired during the course of its existence, is appended, either immediately to the stem, or else mediately to the suffixes *a*, *e*, *i*, and so forth. The same difficulty Mr. Corssen necessarily finds in *amico*, *aperio*, *operio*, of the i-conjugation, where he must likewise explain the suffix *ui*: if he explains it there in the same way as in the a-conjugation, he is at once led, by the second perfect-form of *amico*, viz.: *amic-si*, *amixi*, to the simple stem *amic*, just as in the verbs

sancio, vincio, he must admit the stems *sanc* and *vinc*, in order to explain the perfect-forms *sanxi* and *vinxi*. The same case is found in the *e*-conjugation, where in the perfect forms *ar-si*, *pe-pond-i*, *mo-mord-i*, *vidi*, we must have as much recourse to stems *ard*, *pend*-, *mord*-, *vid*-, as in the perfect-form *ven-i* to *ven*-,* (compare the Greek forms $\delta\omicron\alpha\tau\text{-}\epsilon\text{-}\omega$, $\acute{\alpha}\delta\text{-}\epsilon\text{-}\omega$, $\gamma\alpha\mu\text{-}\epsilon\text{-}\omega$.) Unless we are willing to make short work with all these formations, and to throw them pell-mell into the convenient corner, reserved in all grammars for the reception of the so-called irregular verbs, we must admit these simple stems, of which, on the one hand, the perfect tense is derived, and, on the other, the stems of the present tense are formed. The most simple original form seems to have been that, where the mere stem, e. g. *scand*, *vort* or *vert*, sufficed to express the aorist of the verb, which tense we regard as the primitive formation. Of this we have glimpses in the Sanscrit. The second form expressed a past action by a partial repetition of the stem of the verb, viz. : (*mord-e-o*) *mo-mord i*, (*pu[n]g-o*) *pu-pug-i*, (*tend-o*) *te-tend-i*. In the third form the syllable *vi* is added to the stem, which, after a consonant, was changed into *ui*, but after the suffixes *a*, *e*, *i*, remained *vi*. The fourth form consisted in the syllable *si*.

The vowel *a* is dropped in suffixes, but very rarely, e. g. in *virgo* for *virago*, after it had first been shortened into *virigo*; it is also dropped in *palma* from *παλάμη*, *cupressus* for *κυνάρισσος*, in *cōgo* for *coago*, in *coctus* for *coactus*, and *colescat*, *colescere*, *coluerunt* for *coalesco*, *coalescere* and *coaluerunt*, (I., 135.)

* The simple stem, without *i*, we also find in other forms, mentioned by Mr. Corsen, viz: *prospices* for *prospicies*, (I., 119,) which we have discussed above, and (II., 147, 148,) *convenient* for *conveniat*, *pervenam* for *perveniam*, *pervenat* for *pervenias*, in Plautus, and *evenat* for *eveniat* in Ennius.

E.

The sound of *e*, compared with that of *a*, is produced by raising the tongue towards the palate, and narrowing by this means the cavity of the mouth, so that the air issuing from the wind-pipe, traverses a more contracted passage. Quintilian calls the letter *e* '*planior litera*,' which gives us some clue to its pronunciation.

Neither the short nor the long *e* preserved always the same sound in the Latin language. The short *e* in *verber*, *armiger*, *gener*, *pater*, *inter* was no doubt pronounced as in the English words *father*, *mother*, *sister*, or rather as in *dishes*, *kisses*, etc.; but it sounded differently, and more like *i*, in the Old-Latin, in words like the following, viz., *tempestatebus* for *tempestatibus*, *mereto* for *merito*, *Menervai* for *Minervae*, *fameliai* for *familiae*, since in the language of the educated, at the time of the rise of the literature and during its most flourishing state, it was changed into *i*. We differ, however, with Mr. Corssen who says, that this *e* which was changed into *i*, afterwards turned into *e* again; for we hold, that although this same *e* was temporarily changed into *i*, in the mouth of the educated, it still continued to be pronounced like *e* in the mouth of the people. Thus, neither the long *e* was always pronounced in the same way; for, sometimes, it inclined more to the sound of *ae* or *ai* in pair, and, at another time, more to the long sound of *i* in *machine*, *fatigue*, *intrigue*. In the oldest popular language, even *e* was pronounced for *ae* or *ai*, as in *questores* for *quaestores*, *Pestano* for *Paistano*, *Paestano*, *Cesula* for *Caesula*, *Victorie* for *Victoriae*, *Diane* for *Dianae*, etc., and by the rustic population, at the time of Varro, *edus* was pronounced instead of *haedus*, *Mesius* instead of *Maesius*, *pretorem* instead of *praetorem*. In the later vulgar tongue, the sounds of *ae* and *e* were no longer distinguished at all, and were used indiscriminately, e. g. *caena* and *cena*, *caespes* and *cespes*, *haedus* and *edus*,

maerere and *merere*, *paenuria* and *penuria*, etc. But Quintilian, on the other hand, mentions an *e* which sounded more like the long *i* in *machine*; for he says, "in 'here' [*heri*] *neque e neque i auditur*;" that intermediate sound between *e* and *i*, was expressed in the times before Augustus by *ei*. This intermediate sound between *e* and *i* must, also, be assumed in the ablatives of *i*-stems, e. g. in *classe*, *fine*, *amne*, *ave*, *calle*, *orbe*, *ungue*, *sorte*, etc.; for in these stems there also occurs an ablative ending in *i* which has preserved the original long sound of vowel at the end of words, while it has been shortened in the ablatives in *e*, [here we would say that it has *generally* been shortened, for we still find it long in *fame*]; it must likewise be assumed in the old dative ending in *e*, as in *aere* for *aeri*, in *jure* for *juri*, etc. This intermediate sound of *e* was sometimes spelled in inscriptions with *e* and sometimes with *i*; thus we find *dedit* and *dedet*, *fecit* and *fecet*, and also *salutes* for *salutis*, *Caesares* for *Caesaris*. In olden times, and, as it seems among the rustic population always, it was pronounced when short more like *e* in *let*, but during the flower of the Roman literature, in the mouth of the educated, it had the proper sound of *i* in *machine* (I., 142); and in the later Roman vulgar tongue again, it was sounded partly a full *e* (in *let*), and as such passed over into the Italian language, where it is still pronounced like the English *e* in *let*, or rather when long like *a* in *late*, (I., 207-230).

The letter *e*, as we have seen in our article on *a*, has also been weakened from *a* in unaccented syllables, closing with one or several consonants, and also in words like the following, viz., *septem*, Gr. *ἑπτά* for *ἑπτάμ*, Sanscr. *saptan*; *novem*, Sanscr. *navan*; *decem*, Gr. *δέκα* for *δέκαμ* Sanscr. *daçan*; *carcer*, Gr. *κάραρος*; *farferus* and *farfarus*.

E has been weakened from *o* in *vellere* for *vollere*, *amplecti* for *amplocti*, *vester* for *voster* [this *o* remained in the popular pronunciation, as we can see from the Italian *vostro*], *veto* for *voto*, *velim* for *volim*, *verro* for *vorro*, *verto* for

vorto [the *o* remains here in *vortex* for *vertex*], etc. ; also in the vocative of the *o*-declension, as in *eque* for *equo*, *lupe* λύπε for *lupo*, λύπο, and, moreover, in the reduplication, e. g. *peposci* for *poposci*, *spespondi* for *spopondi*, *memordi* for *momordi*.

E has been weakened from long *ū* in *pejĕro* for *perjuro*, *dejero* for *dejuro*, and from a short *ŭ* in *cecurri* for *cucurri*, *pepugi* for *pupugi*, and *tetuli* for *tutuli*.

E long very seldom changes into any other sound ; however it changes into *i* in *subtilis* from *tela*.

E long is shortened, when followed by a vowel or *h*, in *dĕorsum*, *sĕorsum*, *dĕhinc*, *dĕhisco*, *dĕosculatus*, (II. 157) ; it is shortened by shifting the accent on the antepenult, e. g. *platĕa* from πλατεία, *chorĕa* from χορεία, *balineum* from βαλανεῖον, *gynaecĕum* from γυναικεῖον.

I.

The vowel *I*, according to Mr. Corssen, is produced by drawing the posterior part of the tongue so closely up to the palate, that only a very narrow aperture is left for the air to pass through, when ejected from the wind-pipe. As the tongue serves a very important part, in the pronunciation of the vowel *i*, by pressing against the palate, this vowel, by its very nature, is most intimately related to the linguals or dentals among the consonants.

Whenever the short sound of *i* is found in the written language of the best ages, it appears to have had the proper slender sound of *i* in *is*, *this*, etc., even in the language of the educated, which is expressly stated by Lucilius (150 years before Christ) in Ter. Scaur., p. 2255, with regard to *pĭla* (ball), and by Velius Long. (p. 2216), with regard to *prodĭt*, *vincĭt*, *condĭt* ; nor do the grammarians anywhere mention a broader sound of short *ĭ*, inclining to *ĕ* (I., 142).

In the popular language, however, both of the older and the most modern times, it sounded more like *e* in *let* or *ay* in *bay*. We cannot understand why Mr. Corssen excepts here the vulgar tongue, existing between these older and most modern times, and makes a later tongue return to the pronunciation, prevailing at an early period; yet such is evidently his opinion. In the Oscan language there was a short sound of *i*, inclining to *e*, which, in its own alphabet, was represented by a peculiar sign, viz., 𐌶 , see Corssen, *ib.* [cfr. Mommsen. *Unterital. Dialecte*, table VI., and Aufrecht's and Kirchhoff's, *Umbr. Sprachdenkm.*, I., 22, note.]

Lucilius distinguished a slender long *i* (*tenuē, exilē*, in *machine*), which he wished to represent by *I*, and a fuller, broader *i* (*pingue, plenum*), more like *e* (in *bed*), or *ei* in *deign*), for which he recommended the spelling *EI*, Vel. Long., p. 2220.

'*Hoc illi factum est uni:*' *tenuē hoc facies I.*

'*Haec illi fecere:*' *adde E, ut pinguius fiat.* Corssen, I., 142.

The mark *I* Lucilius intended for the singular cases of *o*-stems, thus for genitives like *pupilli, pueri, Caeli, Numeri, Lucili*, and the datives *illi, uni, toti*. For the plural forms of these stems he recommended *EI*, as *puerei, pupillei, illei*, and Varro agrees with him in thus distinguishing the singular and plural forms, Ter. Scaur. 2255. In the dative-singular of the consonantal (*third*) declension, he again proposes to write *EI*, e. g. *furei, mendacei*, but is opposed by Varro, who calls this inconsistent, and is only willing to use *EI* for plural forms. This rule of Lucilius, however, was never generally adopted, and in the inscriptions the two forms *I* and *EI* are used indiscriminately, so that Quintilian and other grammarians abandoned it as impracticable. Mr. Corssen here continues, that if, according to Lucilius' statement, *pilum* (*a pestle*) was pronounced with a slender *i*, and *meile, meilia, meiles, meilitia, peila* (*darts*) with a broad *i*, we must believe him, that, at his time, some words were pronounced with

an acute and slender *i*, and others with an *i* inclining to *e*, which now can no longer be distinguished.

In the Latin language there was also an intermediate sound between a short *i* and a short *ü* [French *u*?], concerning which, Quintilian says as follows, '*Medius est quidam inter i et u sonus*;' Mar. Vict., '*Pinguis quam i, exilius quam u*;' Vel. Long., '*I scribitur et paene u enuntiatur*;' Prisc., '*Sonum y Graecae videtur habere*." According to the grammarians, this sound is heard in the following words, viz., *Acerrumus, alumenta, artubus, aucupare, aucupium, aurufex, contumax, contumelia, existumat, extumus, intubus, intumus, justissumus, lacrumae, libido, manubiae, manubus, mancupium, manupretium, maxumus, minumus, monumentum, nolumus, optumus, possumus, pulcherrumus, sumus, volumus*. According to Priscian it was moreover heard after *v*, in the following words, viz., *video, vim, virtus, vitium, vix*; still, these last words are never found spelled with *u*, as two *v*'s (*vv*) were generally avoided at the time of Augustus. "This intermediate sound, then," Mr. Corssen concludes, "is mostly found before labials." In the inscriptions, dating from the oldest times to the war with the Cimbri (I., 144), these words were usually written with *u*, and only rarely with *i*; hence the sound, thus represented, must have been identical with, or at least very similiar to that of *u*. The *u* which in the manuscripts of Plautus is invariably used instead of *i*, must therefore be regarded as a relic of olden times, as *decumus, vicensumus, centensumus, legitumus, victuma, aestumo, carnufex, manifestus, pacificari*, etc., I., 145. According to the inscriptions from the times of Cicero, Cæsar and Augustus, cited by Mr. Corssen (I., 145-147,) the sound in question seems, at that time, to have inclined more to *i*, in the mouth of the people, and Cæsar and Cicero wrote *i*, while Augustus retained *u*. Corn. ap. Cassiod., '*Terentius Varro tradidit Caesarem per i ejusmodi verba solitum esse enuntiare et scribere*.' Vel. Longus, '*Optumus, maxumus, in quibus annotandum, antiquum sermonem*

plenioris soni fuisse, et ut ait Cicero, rusticanum.' According to Cicero's judgment, the sound *u* had, therefore, become obsolete in the mouth of the educated, but still continued in popular pronunciation. Augustus, contrary to Cicero and Cæsar, is said to have begun again to spell it with *u*; still, both he and his courtiers are said to have spoken *sinus* for *sumus*, Suet. Aug. c. 87. Mr. Corssen here continues, as the nobility and the other authorities were thus divided at the time of Augustus, we need not wonder at finding in the Virgil manuscripts, *maxumus*, *optumus*, *ultumus*, *pessumus*, *pluruma*, *intuma*, *tegumen*, (I, 146). At all events, the Emperor Claudius still found this intermediate sound, when he ordered the introduction of a new letter for it, viz., *τ*. It is remarkable, however, that this new character is almost exclusively found in the inscriptions in the place of the Greek *υ*, viz., in *Aegτpti* for *Aegypti*, *cτcnus* for *cycnus*, *crτ[pta]* for *crypta*, *Bathτllus* for *Bathyllus*, *mτro* for *myro*, [*c*]*hrτsao[n]* for *chrysaon*; once it is found in the place of a Greek *ι* in *bτb[liotheca]*, and once only in a Latin word *gτbernator*, on account of its relationship to the Greek *κυβερνήτης*, cf. Buecheler Claud. Gramm., p. 18. That this intermediate sound continued even to the latest times, and was never completely superseded by *i*, is shown by the inscriptions from the latest times of the empire. In the Italian language it has almost universally yielded to *i*, as in *ottimo*, *massimo*, *prossimo*, *intimo*, *libidine*, etc.; but it has still been preserved in *documento* and *monumento*, (I., 147, 148). To this we would add, that the question whether this sound still continued in the first period of the Italian language, cannot be decided, inasmuch as it would be necessary first to examine the oldest manuscripts and editions; the orthography of which has been repeatedly changed and improved by the later editors.

While the long *ι* inclining to *e* in *let*, which was for a long time expressed by *ei*, frequently arose from the diphthongs *ai*,

oi, ei, (see these articles,) the short *i* seems to have proceeded from *a, o, u* and *ε*.

The consonants, which manifest a remarkable affinity for the vowel *i*, are the liquid *n*, the dentals *t* and *d*, and the sibilant *s*. The suffix *no, na* can be preceded by any long vowel, but all short vowels it weakens into *i*; it also develops into a full *i* the vowel-like admixture of *n* in formations, as *δν, μν, νν, χν, φν*, which were abhorrent [to the Roman mouth and ears.] Thus we find *balineum* for *βαλανεῖον*, *bucina* for *βυζάνη*, *Catina* (*Catana*) for *Κατάνα*, *machina* for *μηχανή*, *patina* for *πατάνη*, *runcina* for *ρυζάνη*, *trutina* for *τροτάνη*, also *crocinus, cedrinus, tartarinus, dominus, duracinus, sarcina, lamina, crastinus, cardinis*, from *cardo[n]*, *Minerva* for ancient *Menerva*, *in* for *en*, *indu* for ancient *endo*, *minus* for *menus*, *sinu* for *senu*; *mnā* for *μνᾶ*, *gymnasium* and *gymnasium*, *Procine* and *Procne*, *Ariadine* and *Ariadne*; see many other examples, I., 283–285.

A similar predilection for the vowel *i* is manifested by the sibilant *s*, (I., 286.) We have seen in our article on *a*, how *o* and *u* are produced from the vowel *a*, and as an additional proof we may here adduce the change of the old genitive ending *os* through *us* into *is*, e. g. *senatuos, senatuus, senatuis*, contracted into *senatūs*; *magistratuos, magistratuis, magistratūs*; also (*Castoros*), *Castorus, Castoris*; (*Veneros*), *Venerus, Veneris* (I., 286). The affinity of *s* for *i*, is also shown in the late Latin vulgar tongue, where the ending *es* of the nominative singular is changed into *is*, e. g. *cautis* for *cautes*, *vatis* for *vates*, *subolis* for *suboles*, *cladis* for *clades*, *famis* for *fames*, *alis* for *ales*, *vulpis* for *vulpes*, *plebis* for *plebes*, *obsis* for *obæes*, *apis* for *apes*, *nubis* for *nubes*, etc., (I., 287;) and also by the transition of *ius* into *is*, thus *magis* for *magius*, *aliquantisper* for *aliquantiusper*, *satis* for *satius*, *pauillisper* for *pauilliusper*, *potis* for *potius*, *pauillisper* for *pauilliusper*, *nimis* for *nimius*, *tantisper* for *tantiusper*, *ultis* for *ultius*, *magister* for *magiuster*, *minister*, *sinister*, *pris-cus* for *prus-cus*, *sollistimum* for *sollius-*

timum, *sinistimum* and of *a* into *i* in *canistrum* from *κάνιστρον*, *comissor* from *κωμάζω*, *lepista* from *λεπιστή*, *Masinissa*, for *Μασανάσσης*.

Mr. Corssen says that the sibilant and lingual (or dental) *s* is very closely related to the lingual vowel *i*, as regards the position of the organs of speech in its pronunciation. This furnishes a striking proof that the letter *s*, when pronounced, was preceded by a slight vowel-sound, resembling *i*. Hence, as early as the fourth century, we find in the inscriptions *istatuam* for *statuam*, *Ispartacus* for *Spartacus*, *Istaverius* for *Staverius*, *ispirito* for *spirito*, and in manuscripts *iscevas* for *scevas*, *istruis* for *struis*, *istares* for *stares*, *Isticho* for *Sticho*, *Istasime* for *Stasime*.

From the fact, that in the late Latin inscriptions, *anno*, *annus*, *annis*, *anni* are found, instead of *annos*, and *se vivi*, *se vivos*, instead of *se vivis*, Mr. Corssen concludes that the people were no longer conscious of the distinction between the different cases of *vivis*, *vivi*, *vivos*, that in the dative and ablative plural the letter *s* had already been dropped in the pronunciation, and that the accusative plural had dropped its *s*, and weakened its *o* into *i*. The same, he says, is affirmed by the passage *in suis* instead of *in suos*, and *natus* instead of *natis*, which mistakes could not possibly have happened, unless *os*, *us*, *is*, had then already sounded alike in popular pronunciation, that is, unless instead of their own original sounds the plural *i* of the Italians had already been heard.— [In this we can only partly agree with Mr. Corssen, for, as regards the word *annis*, it was well-known to the stone-cutters, from ancient inscriptions, and was used by them, long after the ablative and dative had disappeared from common usage; hence we need not wonder that they should sometimes have used it for *annos*; the same we hold to be the case with *in suis*. From the above passages we rather deem ourselves justified to conclude, that at this time, already the accusative was the universal case (thus *natus* above was not intended for *natis* but for *natos*;) and as regards the forms *annus* and

natus for *annos* and *natos*, they indicate to us that the sound of *o* in *os* had already become obscure, previous to its entire evanescence before the following *s*, when this was changed into *i*, (for Mr. Corssen must recollect that under some circumstances the sibilant *s* passes off into *i*;) in this manner we explain the form *anni* instead of *annos*. In the Italian, however, we not only find the obscure *o* elided, under these circumstances, but also the vowel *e*; for it is a well-known fact, that in this language the letter *s* passes into *i*, not only in the second or *o*-declension, but also in the third or consonant declension, nay even in the verb. In this latter case, i. e., in the verb, whenever the letter *s* was changed into *i*, and formed a diphthong with the preceding vowel, this vowel, in words, consisting of several syllables, was always absorbed by the following *i*, while *m* which passed over into the kindred sound of *u*, with the preceding vowel was blended into a new single vowel, as in *amabam*, *amavam*, *amavau*, Old-Ital., *amavo*; second pers. sing. *amabas*, *amavas*, *amavai*, *amavi*; *amas* (*thou lovest*) is changed into *amai*, *ami*; *patres*, *patrei*, *patri*; *matres*, *matrei*, *matri*; but in monosyllables the diphthongs, thus formed, are not contracted, as in *sex*, *ses*, *sei*; *vas*, *vai*; *fas*, *fai*, etc. In Greek, likewise, we meet with the change of *s* into *i*; as in *ἐσμί*, *εἰμί*, *ἐσμέν* *εἰμίν*, and perhaps we can trace it in the Latin itself. We never felt fully satisfied with the usual explanation of the second person plural of deponent and passive verbs (*imini*.) While all the other persons were satisfactorily explained by the affixing of the reflexive pronoun, we were taught that the second person plural alone makes an exception to this general rule, and that, in order to explain its origin, we must assume separate participles for each of the tenses of the three moods in which it occurs, thus *legiminus* for *legimini*, *legaminus* for *legamini*, *legebaminus* for *legebamini*, *legereminus* for *legerimini*, *legeminus* for *legemini*, and *legiminus* for *legiminor*, etc., which is simply absurd. In explaining this form, we again start with the imperative mood, as in all cases, which accord-

ing to our idea, is the form next produced after the aorist ; *legiminor* stands for *legiminos*, so that in this ending, too, we have *os* instead of *so* or *ro* ; *imin* we hold to be the old word *yusman* (*you*) accusative case, which still exists in the Sanscrit ; or *or* or *os* means *selves* ; thus *ἰμας* for *ἰμᾶς*, (*a* is changed into *i* before *n*, *v* into *i*,) together with *or* forms *legiminor*, *read yourselves*, *ἰμας αὐτς*, which is even more used in this connexion, than *ἰαυτς*. This final *os* became *oi*, *ei*, *i* in the present, and thus in all other tenses. Cf. Benfey, Sanscr. Grammar, p. 124 ; Bopp, Vergleich. Gr. II., 123. We deem ourselves just as much at liberty, in elaborating this present theory, to dive into ante-historical ages, as the originator of the former one.

There also exists an affinity between the linguals or dentals *d* and *t*, and the vowel *i*, but this did not manifest itself so decidedly in the oldest times, as we frequently find *e* in ante-Augustan inscriptions, where afterwards we find *i*, e. g. *mereto* and *meretod* for *merito*, *apparetoris* for *apparitoris*, *habetabatur* for *habitabatur*, *intercedeto* for *intercedito* (I, 290). According to Mr. Corssen, the characteristic vowel *a* of the *a*-conjugation, and the vowel *e* of the *e*-conjugation are frequently not only shortened into *ē*, but by the influence of the following *t*, also changed into *i*, e. g. *habitum*, *habitus* for *habētum*, *habētus* ; *exercitum*, *exercitus*, *exercitium* for *exercētum*, *exercetus*, *exercetium*, etc. (I, 291).

I also appears instead of *e* before *d*, in the adjectives which are derived from verbs of the *e*-conjugation, and from nouns of the *a* and *u*-declension, while in the popular pronunciation the letter *e* seems to have remained, e. g. in *pavidus* from *paveo*, *albidus* from *albeo*, *viridis* for *viridus* from *vireo*, *frigidus* from *frigeo*, *herbidus* from *herba*, *gelidus* from *gelu*, etc. (I., 292). On the other hand, we find *soledus* for *solidus* in an inscription, dating from the time of the Gracchi, and in the provincial Latin, at the time of the empire, we find *Caledius*, *Muredius*, *Veibedius*, *Calvedius*, *Sultedius*, *Vettedius*. Still more, we not only find it before *d*, but likewise,

before other consonants, as in *menus* for *minus*, *menester* for *minister*, *fescu* for *fiscu*, *senu* for *sinu*, *dulcissima* for *dulcissima*, *lecuerunt* for *licuerunt*, *oreginem* for *originem*, etc.; while in the provincial Latin of Southern Italy, *i* is found, where in the cultivated Roman *e* is retained, e. g. *rim* for *rem*, *ist* for *est*, *dibito* for *debito*, *sedito* for *sedeto*, *fruminto* for *frumento*, *sinatum* for *senatum*, *cinsum* for *censum*, *cinsuerint* for *censuerint*, *habibit* for *habebit*, *venirandae* for *venerandae*, *ditulit* for *detulit*, *cinerim* for *cinerem*, *sicundo* for *secundo* (I., 297). Traces of this more modern *i* are also found in the later vulgar tongue, outside of Southern Italy, as in *rinovato* for *renovato*, *dipositus* for *depositus*.

Mr. Corssen is perfectly right in citing both long and short vowels, to which prosody, at one time, attributes one, and, at another, two lengths; and, also, in declaring, that in a living language there are sounds, which cannot be strictly said, either to possess one, or two lengths, and which, when measured by this scale, are found to be either a fraction too long or too short, just as in music, where besides the regular whole, half, quarter, eighth and sixteenth notes, there are also other intermediate ones between each of these, which *cannot be absolutely measured*, that is, which are *irrational*. He, moreover, says that before a long vowel, measuring two lengths, is completely reduced to a short vowel, measuring one, it first passes through an intermediate state in which it is neither long nor short; and, that before a short vowel, which measures one length, is rendered perfectly inaudible, it first shrivels up into a fraction of a length, and often continues for a long time in this crippled state, before it finally expires. These fragments of vowels he compares with the Shevas in the Semitic languages, which present a great variety of shades, as regards their pronunciation. This comparison we find excellent, but we believe that the Sheva is not always the fragment of a vowel, but in many cases, both in nouns and in verbs, the embryo from which in the originally mono-

syllabic words of the Semitic languages, in the course of time, a full vowel was developed, forming a new syllable, e. g. (he reigned) Aram. *n'lakh*, Hebr. *malakh*, Arab. *malakha*; (king) Syr. and Chald. *n'lakh*, Hebr. *melekh*, Arabic *malkhon*, *malikhon*.

O.

In the pronunciation of the vowel *o* the lips are contracted into somewhat of a circular form, and the anterior part of the tongue is depressed, so that the breath, ejected from the wind-pipe, resounds through the round cavity of the mouth; '*cavo ore*' as Quintilian has it. As a general thing the vowel *o* was pronounced, as in all other cognate tongues. Only the *o* contracted from *au*, according to Mr. Corssen, sounded less clear, but more full than the ordinary *o* in *poto*, *dono*, *honore*. The Romans, like the Oscans, did not distinguish the long and short *o* in writing; but their quantity was sometimes indicated by the apex (I., 9--11).

The short *o*, as can be proved, in most cases arose from an original *a*, and it manifests, especially, a great attraction for *v* and *u*, before and after which letters it even remained in after-times, when it ordinarily passed off into *u*, *i* or *e*, (I., 233--235). Compare the following scheme.—

Lat. <i>pars</i> ,	Lat. <i>portio</i> ,	Lat. <i>impertio</i> ,
Sanscr. <i>avi</i> ,	" <i>ovi</i> ,	[Engl. <i>ewe</i> ,]
" <i>navas</i> ,	" <i>novus</i> ,	Gr. <i>νεφος</i> , Germ. <i>neu</i> ,
		[Engl. <i>new</i> .]
" <i>éattváras</i> ,	" <i>quatuor</i> ,	Gr. <i>τέτταρες</i> ,
" <i>vaéas</i> ,	" <i>vox</i> ,	" <i>ῥέπος</i> ,
" <i>vat</i> ,—	" <i>voc-o</i> ,	" <i>ῥέπω</i> ,
" <i>vam</i> —	" <i>vom-o</i> ,	" <i>ῥέμω</i> ,
Lat. <i>vacuus</i> ,	" <i>vocus</i> , <i>vocivus</i> , <i>vocatio</i> ,	
Sanscr. <i>baranti</i> ,	" <i>veivont</i> , <i>vivunt</i> * [Span. <i>viven</i> ,]	

* "*Carmen Saliare*," *tremonti* [Gr. *τρέμονται*, *τρέμονται*] for *tremunt*.

	Lat. <i>voster</i> ,	Lat. <i>vester</i> ,
	" <i>vorto</i> .,	" <i>verto</i> ,
	" <i>volo</i> ,	" <i>veto</i> ,
Sanscr. <i>pad</i> ,	Gr. <i>παῖς</i> ,	Lat. <i>compos</i> , <i>compes</i> ,
[Engl. <i>sang</i> past, Engl. <i>song</i> , <i>sung</i> ,		Engl. <i>sing</i> , present
primitive form, first derivative,		second derivative],
Sanscr. <i>ganilar</i> ,	Gr. <i>γονεῖς</i> ,	Lat. <i>genitor</i> , <i>γενετήρ</i> .

O was weakened into *ū* and *ī*, as in *senatu-us* [*senatu-us*],* *senatu-is*, *senatus*; *domu-os*, *domu-us*, *domu-is*, *domūs*; *magistratu-os*—*uus*,—*uis*, *ūs*; [*Castor-os*], *Castorus*, *Castoris*; [*nomin-os*], *nomin-us*, *nomin-is*. Also in *part-is* for *part-us*, *Vener-is* for *Vener-us*, *Cerer-is* for *Cerer-us*, *honor-is* for *honor-us*, in all of which cases, by analogy with the above examples, we are led to assume an original suffix [*as*] *os*. The vowel *o*, also, in the classical Latin, has been weakened into *u* in the termination *us* of the nom. sing., and *um* of the nom. and accus. sing., and genit plur.; for, in all inscriptions, before the time of Augustus, and, especially, after the letters *v* and *u*, we find *o* instead of *u*, in these cases, e. g., *donom* for *donum*, *pocolom* for *poculum*, *sacrom* for *sacrum*, *poublicom* for *publicum*, *locom* for *locum*, *Vulcanom* for *Vulcanum*, *captom* for *captum*, *olorom* for *olorum*. We also find *filius* for *filius*, *mortuos* for *mortuus*, *servos* for *servus*, *vivos* for *vivus*, *abavos* for *abavus*, etc. (I., 244, 245).

The pronunciation of *o*, in these suffixes, according to our theory, gave way to that of *u*, in the mouth of the townsmen and the educated people in general, during the classical period of the Roman language, but was preserved, during the whole of this time, among the rustic and the lower people, and, in the course of time, became again universally dominant in the Italian language, with the exception of the island of Sardinia, where we are told, the obscure sound of *u* still prevails, both in writing and in pronunciation. This is our

* Thus we find *conventu-us*, *exercitu-us*, (II., 143).

opinion on the subject; and we do not consider Mr. Corssen justified in maintaining (I., 245, 246), that the popular pronunciation, at a later period, again returned to that, which was in use in olden times. Mr. Corssen himself furnishes some proofs for our assertion, Vol. I., p. 256, ff, where he says, that, in olden times, this same [obscure] sound was generally pronounced like *o*, that, at the time of Accius and Lucilius, it seems to have been an intermediate sound between *o* and *u*, inasmuch as we observe a vacillation in its spelling [in the inscriptions], and, that in the latest times of the republic, in the mouth of the *educated*, it received the full sound of *u*, while the sound of *o* had not yet entirely vanished in the popular pronunciation.

When *o* was preceded by *v*, it maintained itself as late as the time of Quintilian (I., 260), e. g. in *volt* for *vult*, *voltis* for *vultis*, *voltus* for *vultus*, *volgus* for *vulgus*, *volgivaga* for *vulgivaga*, *volpes* for *vulpes*, *Volcanus* for *Vulcanus*, *volnus* for *vulnus*, *avolsa* for *avulsa*, *divolsa* for *divulsa* (I., 260).

When preceded by *i* or *e*, the letter *o* is prevented from becoming *u*, even before *l* (I., 256), e. g. *sciolus*, *viola*, *luteola*, *lineola*, *alveolus*, etc.; while we find *vinolentus*, *sanguinolentus*, *somnolentus*, *obolus*, together with *vinulus*, *spicula*, *spinula*, etc., (I., 257). In the later vulgar tongue, we again find *facoletatem* for *facultatem*, *tòmolo* for *tumulo*, *famolus* for *famulus*, *console* for *consule*, *tetolum* and *tetolo* for *titulum*, *vocabolom* for *vocabulum*, etc., (*ib.*).

O arose by assimilation, in words like *soboles* for *suboles*, *socordia* for *secordia* (I., 306).

O, originally long, was shortened in nominative endings in *tôr*, *sôr*, and *ôr* in general, as in *stultior*, *auctior*, *longior*, and also in verbs, as in *fateor*, *miror*, etc.; likewise, in the ending *ol* in *consol* (I., 363--366). It was, moreover, shortened in ablative adverbs (I., 342), as in *cûto*, *profecto*, *porro*, *sero*, *postremo*, *immo*, *illico*, *modo*; also in the ablative of the gerund, as in *mulcendo*, *manando*, *vincendo*, etc., (*ib.*), and

in the duals *ambo* and *duo*, and the numeral *octo* (Gr ὀκτώ), contracted from *au*, compare *octavus*.

The *o* long of the original suffix *on* was shortened, as in *homō*, but it generally remained long, until after the time of Augustus (I., 343, 344); still, by the arsis it can be made long again. The same, also, applies to the ending *o* in the first person sing. of verbs, e. g. in *eō*, *agō*, *volō*, *sciō*, *sinō*, *negō*, *dabō*, *erō*, etc., (I., 345--347), and to the ending *o* of the imperative mood, e. g., *dātō*, *estō*, *respondetō*, (I., 347).

The vowel *o*, is dropped in the formation of feminines, as in *actrix*, (*actorix*, *acterix*,) from *actor*, *accusatrix*, (*accusatorix*, *accusaterix*,) from *accusator*, *genitrix* from *genitor*. Mr. Corssen says (II., 4), that after the suffix *ic*, was added to the masculine *victor*, etc., the vowel *o*, in the penult was shortened, because an unaccented penult cannot continue long, when the stress or ictus is on the antepenult. Subsequently, the letter *o* in *victorix* was elided, after it had very likely been first reduced into *e*, as in *temperi*, *pigneri*, instead of *tempori*, *pignori*, etc. It was dropped in a similar manner in *textrina*, *tonstrina*, *pistrina*, *latrina*, where the suffix *tor* denotes the acting person, and the suffix *ina* the place where this person generally performs his actions; it was likewise dropped in *cornix* from κορώνη, and in *neptis* and *proneptis*, from *nepos*, after this had first been changed into *nepōtis*, *pronepōtis*, and afterwards into *nepītis* and *pronepītis*.

The vowel *o* is rejected at the end of words, e. g. in *ab* from ἀπό, *sub* from ὑπό, (II., 56); at the end of unaccented syllables, as in *mālo* for *mavolo*, *Ma-rs* from *Ma-vors*, *sursum* for *suvorsum*, (II., 133); further at the end of the first member of compounds, e. g. in *rem[o]igium*, *un[o]culus*, (II., 134). The first letter of the second member of compounds disappears before *o*, as in *colescat* for *coalescat*, *colescere* for *coalescere*, *coluerunt* for *coaluerunt*, and *coctus* for *coactus*, (II., 134, 135). Mr. Corssen says, (II., 147), that more rarely one of the two unaccented vowels of the two last syllables in a word is elided, of which both belong

to the suffix, appended to the stem, as *ali-s* for *ali-os*, *ali-d* for *ali-od*. The same also sometimes happens before the *s* of the nominative case in the provincial Latin, as well as in the Oscan and Umbrian, e. g.

Prov. Lat.	<i>Bruti-s</i>	Osc.	<i>Heirenni-s</i>	Umbr.	<i>Trutiti-s</i>
"	<i>Fulvi-s</i>	"	<i>Niumsi-s</i>	"	<i>Koisi-s</i>

U.

In the pronunciation of *u*, the organs of speech occupy the same position as in the pronunciation of *o*, with this exception that the lips are not only contracted, but also protrude, so that the entrance into the cavity of the mouth is narrowed, by this means, and the sound of *u* produced.

Inasmuch as in the pronunciation of *u* the lips are principally active, this vowel has a decided affinity for the labials, and Mr. Corssen (I., 149) hence calls it the *labial* vowel, *i* the *lingual*, *a* the *guttural*, and *e* an intermediate vowel between the guttural *a* and lingual *i*, and *o* between the guttural *a* and labial *u*. We have no objection to Mr. Corssen's calling *i* a lingual or dental vowel, and *u* a labial, for in the former the tongue is prominently active, and in the latter the lips appear to be so, although in reality the vowel *u* is formed far down in the throat, and, with some practice, can be pronounced there, with the mouth wide open. The history of the Latin language, also, furnishes us with clear instances, where these two vowels are influenced by their respective consonants, and manifest a strong affinity for them; but we do object to his calling the vowel *a* a guttural vowel, for that part of the mouth, where the guttural consonants are formed, is not any more active in the pronunciation of *a*, than in that of any other vowels; moreover, Mr. Corssen does not furnish us with one single instance, where the guttural consonants exert

any particular influence over *a*, or where this vowel manifests any peculiar affinity for them. In some future work, where we shall treat on the formation of the vowels and consonants, we shall enter more fully into this subject.

The long *ū* has several origins. It is contracted from *au* in words like the following, viz. : *rudus* for *raudus*, *rudusculum* together with *rauduscula*, *adrudus* for *adraudus*, *defrudo* for *defraudo*, *frustra* for *fraustera*, *frudes* for *fraudes*, *frudavi* for *fraudavi*, (Plaut.) *cludo* for *claudo*; in the Umbrian, also, we find, *uhtur* for *auctor* and *turuf* for *taurus*.

It is derived from *ou* in *pūblico*, *poplicod*, *pouublicom*; *nūntius*, *nōntiata*, *nountios*; *nūndinum*, *nōndin[um]*, *nounas*, *noundinum*; *Nūceria* for *Nouceria*, (I., 174.)

It is very seldom formed from *eu* in *Lūcetium* for *Leucesio* (I., 176, 177), more frequently from *oe* and *oi*, as in *ludunt*, *ludeis* from *loedos*, *lideos*; *ūnum* from *oenus*, *oino*; *plūres* from *ploera*, *plourume*, *mūnicipium* from *immoenis*, *moinicipium*; *ūtier* from *oetier*, *oitile*; *cūrarunt* from *coeravit*, *coiravit*; *mūrum* from *moerum*, *moiro*; *pūnire* from *poena*, *ποινή*; *Pūnicus* from *Poenus*, *Poenicia*.

The Latin *u*, when long, generally sounded like *u* in *rule*, and when short, like *u* in *put*, or *oo* in *book*, and Marius Victorinus is right in saying, "*U literam, quam nisi per ov conjunctam [French ou in jour], Graeci pronuntiare non possunt.*" The Latin *u*, thus sounded like the German *u* or the English *u* in *rule* or *put* [or *ou* in *should*]. The Greeks generally represented it by *ov*, which corresponds to the above *u* in *rule* and *put*, sometimes by *o*, and very rarely by *v*. Mr. Corssen is perfectly right in saying (I., 149), that unless the Greeks marked a very decided distinction between the short Latin *u*, and the short vowels of their own tongue, in writing Latin words, they would never have represented the short Latin *u*, in all cases, by the mark of their diphthong *ov*.

The fact that the Latins, in a certain number of words, had an intermediate sound, for which the Emperor Claudius in-

vented a peculiar mark, we have noticed above in our article on *i*.

U was weakened from *a* in the second member of compounds, after it had first lost its accent by composition, e. g., *occupo*, *aucupor* from *capiō*, where the *u* remains unaccented and *aucupium*, *mancupium*, *occupio*, where it afterwards regained its accent; *derupio*, *surrupio*, *surrupitiæ*, *surrupitus*, *eruptus* from *rapio*; instead of the later forms, *deripio*, *surreptus*, etc.; *enubro*, from *en-habeo*, *inhibeo*; *illuvies* for *inluvium*, *diluvium*, *malluvium* for *manluvium*, *pelluvium* all from *lavo*; *desulio*, *dissulio*, *insulio*, *prosulio*, *exsulio*, *desultor* from *salio*, which, at a later period, were partly weakened into *dissilio*, *desilio*, *prosilio*; *conculco* from *calcare*; *concutio*, *concuotio* from *quatio*; *absurdus* from *sardare*.

O became *u*, in the *o*-declension before *s* and *m*, in the mouth of the educated, (I., 239, 241), thus *tribunus* for *tribunos*, *Plautius* for *Plautios*, etc., *donum* for *donom*, *poculum* for *poculom*, (I., 41). In a similar manner, in the consonantal and the fourth or *u*-declension, *o*, at an earlier period, was changed into *u*, e. g., *nominus* for *nominos*, *domuus* for *domuos*, *senatuus* for *senatuos*, and this *u* was afterwards changed into *i*, e. g., *nominis* for *nominus*, *senatus* for *senatuus*.

The labials *b*, *p*, *f*, *m*, show a natural affinity for the vowel *u*, in the pronunciation of which the lips are mostly active (I., 252–254), [compare the Hebrew *u* instead of *ve* before *b*, *m*, *ph*], for this reason *glaucuma* was made of *γλαύκωμα*. The original *o* of the first pers. plur., which in Sanscrit is *a*, in Greek [and old Slavonic] *o* with a nasal sound is obscured into *u*, but, subsequently, mostly reduced into *i*, as in *sumus* [for *esomos*], Gr. *ἐσόμεθα*; *volumus* for *volomos*, Gr. *βηρόμεθα*, *nolumus* for *nolomos*, *malumus* for *malomos*, [*quaesumus* for *quaesomos*]. For the same reason *u* appears, in the old Latin, before suffixes commencing with *m*, as in *decuma*, *infumum*, *lacrumas*, *maritumeis*, *optuma*, *probisuma*, *maxume*, *proxumeis*, *vicensumam*, *ploirume*, *facilumed*.

Thus *a* and *e*, before the suffixes *monio* and *mento*, passed into *u*, as in *testumonium* from *testa*-, and *monumentum* and *documentum* from *mone*-, and *doce*-. Mr. Corssen, very unnecessarily, it seems to us, derives *testimonium* from *testis* as *humanus*, from *huminem*, which form is mentioned by Priscian. In the above suffixes, also, the vowel *u* was afterwards reduced into *i*. In the latest Latin, we also find *o* in *monumentum* (I., 253) which may be a remnant of antiquity in the vulgar tongue. Very pertinent instances of the strong affinity existing between *m* and *u* are the Plautian forms *drachuma* for *δραχμή*, *Alcumena* for *Ἀλκμήνη*, *Alcumaeo* for *Ἀλκμαίων*, *Tecumessa* for *Τέκμησσα*: in order to obviate the combination *cm*, which was not convenient to Roman organs, the vowel-like admixture of *m* was there developed into a mute *u*, as that of *l* in *Hercules* and *Aesculapius* (I., 253). In case *f* or *b* was the *initial* of the second member of compounds, *u* was originally, in most cases, made the *final* of the stem; nay, it even favored the generation of *u* in the following syllable. This we see illustrated in the following Plautian forms, viz: *sacrufico* for *sacrifico*, *magnuficus* for *magnificus*, *fumuficem*, *signuficem*, *spurcuficum*, *pontufex*, *munuficus*, *opufex*, *carnufex*, *carnuficina*; and this *u* remained in *manufestus*. We, also, find *bubus* for *bobus*, *rubeus* together with *robeus*, *rubustis* with *robustis*; *Hecuba* from an older form *Hecoba*, Gr. *Ἑκάβη*; and *ebur* together with *ebor*, *robur* with *robor* (comp. *marmur* for *marmor*), *tubulustrium* from *tuba*.

When followed by *l*, as well in stems, as in the suffixes *ulo*, *bulo*, *culo* and their derivatives, the vowel *o* of the Old-Latin is obscured into *u*. In the older inscriptions the original *o* was frequently preserved, and appears still in some inscriptions during the time of the empire, but in the later inscriptions [after the written language again approximated to the vulgar tongue], it most decidedly came into use again. Some traces of the obscuration of *o* into *u* are visible at a very early period, as in *Cesula*, *adulescens*, *epistula*. About the time of Lucilius

and Accius a vacillation is seen, in the inscriptions, between *o* and *u*, e. g. *detulerit* and *detolerit*, *tabulas* and *taboleis*, *populus* and *popolus*, *singulos* and *singolos*, etc., (I., 255). According to Mr. Corssen, the change of *o* into *u* before *l*, in the classical period of Roman literature, was owing to the affinity between *l* and *u*. The letter *l*, as we have seen above, as an *initial*, and after *l* had a *lighter* sound, and, in all other cases, one which was *fuller* and *heavier*. This latter sound is produced, when, in pronouncing *l*, we bend up the tongue towards the palate, as is done in the pronunciation of *u* [?]. By this means the consonant *l* obtains a vowel-like admixture, resembling *u*, which assimilates all preceding vowels into *u*. The Greek *λ*, on the other hand, contrary to the Latin, has always the more slender and lighter sound, and hence before the suffix *λο* it is not only attended by *ο*, *υ* and *ι*, but also by the clear sounding vowels *α* and *ε*, while the Latin *l*, during the classical period of the language and literature, with a few exceptions, only suffered *u*, unless it was exposed to the influence of a preceding vowel which demanded *ο*. See the following examples.

<i>pessulus</i>	for	πάσσαλος,	<i>Siculus</i>	for	Σικελός,
<i>vitulus</i>	"	ιταλός,	<i>nebula</i>	"	νεφέλη,
<i>crapula</i>	"	κραϊπάλη,	<i>paenula</i>	"	φαινόλης,
<i>scutula</i> ,	"	θρυτάλη,	<i>triobulus</i>	"	όβολός,
<i>scopulus</i>	"	θρόπελος,	<i>condulus</i>	"	πόνδυλος,
<i>spatula</i>	"	βπατάλη.			

Menolaus for *Μενίλαος*, and *Patricoles* for *Πατροκλής* are the only instances which make an exception. When the liquid *l* is followed by another consonant, the vowels *ο*, *α*, *ε*, are obscured in a like manner into *u*. Thus we find *multa* for *mollicatod*, *consultum* from *consoltu*, *occulto* from *oquoltod*, *culpa* from *colpa*, *pulcher* from *πολύχρους*, *cultus* from *colo*, *adultus* from *adole*, *stultus* from *stolidus*, *ultra* from *olus* (*oloes*), *puls*, *pulmentum* from *πόλτος*, *sulcus* from *ιλλός*, *Culchis* from *Κολχίς*, *bulbus* from *βολβός*, *imbulbito* from *βόλβιτον*, *ulna* from *ιλίνη*, *pulvis*, *pollen* from *παλή*, *pulsus*, *vulsus* from *pello*,

vello, *perculus* from *percello*, *mulgeo* from ἀμίλω, *promulco* from *promellere*, *remulcare* and *remeligines*, *sepulcrum* *sepultus* from *sepelio*, *catapulta* from καταπέλτης, *fulmen*, *fulgor* [*flamen*] from *flagro*, *fulvus* from *flavus*, *tremunt*, (*Carmen Saliare*) *tremonti*, *dederunt* from *dederont*, etc., *sunt* for *sont*, etc., (I., 160, 161).

Before other consonants, also, *o* was obscured into *u*, as before *nt* and *nd*, in *nuntius* from *nontius*, etc., *Acheruntem* from Ἀχέρωντα, *frunte*, for *fronte*, *Frunteni* from *Frontoni*, *funte* for *fonte*, *promuntorium* for *promontorium* (I., 262), *mntanus* for *montanus*, Σεπτομόντιον for *Septimontio*; also in *faciundam* for an old form *faciondam*, *frundes* for *frondes*, *dupundi* for *dupondi*, further *Brundusium* for Βρεντίσιον, *Bruttii* for Βρέττιοι, Βρέττιοι.

Before *ns*, *o* appears obscured into *u* in *procunsul* for *proconsul*, *formunsus* for *formonsus*, *formosus*, *frus* (Ennius) for *frons*; also before *nc* in *hunc* for *honc*, *sescunciam* for *sesconciām*, and in the formations, in which to the first prefix—*on*, *tion*, a second—*culo*[*a*] was appended, as in *caruncula* from *caron*, *caro*; *carbunculus* from *carbon*, *carbo*; *homunculus* from *homon*, *homo*; *avunculus* from *avon*, derived from *avo*, *avus* by the suffix—*on*.

In case the diminutive suffix *ulo* is added to the derivative syllable *on*, the vowel *u* of the former is frequently rejected, and the letter *n* of the latter assimilated to the following *l*; the vowel *o*, however, before *u* from *nl*, is obscured into *u*, e. g., in *lenullus* from the stem *lenon*, *homullus* from *homon*, *Catullus* from *Catonulus*, *Catonlus*, *Catollus*, *Catullus*, etc., (I., 263.) In a similar manner *ampulla* was shortened of *amporula* from *ampora*.

O was, likewise, changed into *u*, before *m* with a following consonant, as in *umbo*, *umbilicus* from Gr. ὀμφαλός, *incomparabili* for *incomparabili*, *triumpe* from θρίαμβος, (I., 264.) Into this category, also, belongs, according to Mr. Corssen, the Lat. suffix—*umno*, which corresponds to the Greek participle ending ὄμενο, and shows *u* before *mn*, e. g., *alumnus*

from *alere*, *auctumnus* from αὐξομένη, *columna* from κελλομένη, etc., (I., 164).

O and e were, also, obscured into u, before r, when followed by n, e. g., *eburneus* from *eboris*, *nocturnus* from νύκτωρ, *diurnus* from *dies*, together with *hodiernus*. The syllable *tur* in *diuturnus* is the comparative suffix *tero*, Osc. *toro*, *tro*, Umbr. *tru*. Gr. τερο, Sanscr. *tara*. In a similar manner we find *furnacator* and *fornacatores*, etc., (I., 264. 265). Before *rc*, *rt*, *rv*, *rm*, and *s* when followed by another consonant, we also find *u* obscured from *o*, e. g., *amurca* from ἀμοργή, *furcepem* for *forcipem*, *Maburtis* for *Mavortis* Κουρουίνος from *Corvinus*, *furmica* for *formica*, *arbustum* from *arbos*, *minusc ulus* from *minos*, *aplustre* from ἀπλαστον, (I., 265).

U arose by assimilation, according to Mr. Corssen, in *tugurium* for *tegurium* from *tego*, or *togurium* from *toga*, (I., 306.)

U which was originally long, was shortened before *s*, as in *palūs*; but in some passages in Plautus, Virgilius, and Ovidius it is still found long in the verb, as in *vénimūs*, *fatigamūs*, *negabamūs* (I., 360).

The vowel *u* was shortened before the *m* of the Genitive plural, both in consonantal, and also in some i-stems, e. g., *matrum*, *partium*; but it remained long in the genitive plural of o-stems, as in *numūm*, *deūm*, *sestertium*; as also the vowel *o* in the Old-Latin forms *Aiserninōm*, *Aiserninō*, *Romanō*, *Suesanō*, *Ladinom*, *Aquinō*, *Caiatinō*, *Calenō*, *Coranō*, *Cozanō*, *Paistanō*, *Romanō*, (I., 367).

U is likewise shortened in *pūsillus* from *pūsus*, *pūsio*, in *būbus* from *būbus* and in *būbulcus*, and also in Virgil in *diūturnus* from *diū* (I., 373). Lastly it is shortened when followed by another vowel, as in *acūi*, *tribūi*, *indūi*, *argūi*, *imbūi*, *imbūi*, *exūi* [*fūi* for *fū[v]i*, *genūi* for *genūvi*].

Fūi was shortened from *fui*; *fūi* stands for *foui*[?]; *u* in *foui* was hardened into *v* as is shown in *foverint*, etc., (II., 159).

Diphthongs.

After treating of the orthography and development of the gutturals, labials and dentals, as well as of that of the simple vowels, Mr. Corssen shows how the compound vowels or diphthongs took their rise, and, in the course of time, after passing through many changes, dwindled down again into simple vowels. He says, "We cannot follow the Latin into the illustrious time of its youth, when the system of its vowels continued unimpaired. In the third century before Christ, where our knowledge of this language begins, this system was already on the decline; diphthongs were losing their original purity, long vowels were shortened and short vowels rejected without leaving any evidence that they ever existed. Indeed, the whole system seems to have been in a state of commotion: older and fuller forms appearing continually among the lighter mass of new formations, until at last, in the classic time of literature, after ridding itself of all the old sounds and forms, the language arrives at a state of rest and solidity. In the written language the system of vowels continues in this state, but in the vulgar tongue it is broken up more and more, until at last it appears in that form in which it is presented by the modern Romance tongues." (I., 154)

Mr. Corssen continues (I., 154, 155), "The diphthongs arise in the Indo-Germanic [better, Indo-European] languages principally by an *intensifying of the vowels* ("Vocalsteigerung"). In the Sanscrit the simple vowels *i* and *u* are *intensified* ("gesteigert") into *ē* and *ō* by the prefixing of the short sound of *ā*, and into *ai* and *au*, by the prefixing of a long *ā*. Thus by prefixing a short *ā* before *i* and *u*, not two vowels are produced, each of which constitutes a syllable, but one intermediate sound between *ā* and *i*, and *ā* and *u*; and by prefixing a long *ā* a double intermediate sound or a

diphthong, which, likewise, only forms one syllable. Under the same conditions on which the vowels *i* and *u* are intensified in the above manner, in the Sanscrit, the short *ā* itself, whenever the form of the word requires it, by intensifying, is prolonged into *ā*. In the Greek the diphthongs *au* and *ou* arose, likewise, by an intensifying of the vowels; unless it can be proved that they originated in some other manner; and as an original *α* has been frequently weakened into *ι* and *ο*, in this language, the vowels *ι* and *υ* by intensifying, also, produced the diphthongs *ει*, *οι*, *ευ*, *ου*. In a similar manner, as a general thing, the genuine Latin diphthongs *au*, *ou*, *oi*, *eu*, *ei* arose by an intensifying of the vowels *i* and *u*, unless they originated in a more mechanical way by the addition of a suffix commencing with a vowel, to a stem ending in a vowel, or else, by two vowels forming a diphthong upon the rejection of a consonant, or by the semi-vowel *v* being dissolved into *u*, before a following consonant, and thus constituting a diphthong with the preceding vowel. The intensifying of the vowels, in the Latin language, frequently escapes the notice, because its diphthongs are often blended into a simple long sound. Still there are some examples left, by which we can see, how in the old language, by intensifying, a short *ū* became *ou* and *eu*, and a short *ī* *oi* and *ei*, which, however, at a later period, were blended into *ū* and *ī* (I., 155–157), e. g.

<i>ū,</i>	<i>ou,</i>	<i>eu,</i>	<i>ō,</i>	<i>û,</i>
<i>lūcerna,</i>	<i>Loucina,</i>	<i>Leucesie,</i>		<i>lūx (lūcem).</i>
<i>pōpulus,</i>	<i>poupublicus,</i>		<i>pōplicus</i>	<i>pūblicus.</i>
<i>dūc-is,</i>	<i>abdoucīt,</i>			<i>dūco.</i>
<i>jūgum,</i>		<i>ζεύγος,</i>		<i>jūgera.</i>
<i>ī,</i>	<i>oi,</i>	<i>oe,</i>	<i>ei,</i>	<i>i, ē,</i>
<i>fīdes, foidere,</i>			<i>difeidens,</i>	<i>confido.</i>
<i>libet, λιβή,</i>			<i>leiberis,</i>	<i>liber.</i>
<i>libido, (loibesum) loebезum,</i>			<i>leibertini,</i>	<i>liber.</i>
<i>īdem</i>		<i>eis</i>	<i>ē-eis (for ē-is, or ī-is).</i>	
<i>ju-dīco</i>		<i>deixeris,</i>		<i>dico, etc.</i>

"The vowels *ă*, *ĕ*, *ŏ* cannot be changed into diphthongs by the prefixing of *a*, on which account, as in the Greek, where *i* by intensifying becomes *ei* and *oi*, and *u*, *eu* and *ou*, they are simply made long. This is principally done in the derivation of nouns from simple verbs, which often are no longer found in this simple form, but by the suffixes *a*, *e*, [*i*], have passed over into the *a*-, *e*-, [or *i*-] conjugation, e. g. *pāc-unt* and *pāc-s pāc-is*; *pāciscor* and *pāc-[ao]o*; *frāg-or* and *suf-frāgium*; *lēg-o* and *lēg-s, lēx (lēg-is) collēg-a*; *rēg-o* and *rēg-s, rēx (rēgis)*; *sēc-[ao] o* and *sica*; *tēg-o* and *tēg-ula*; *vāc-[ao] o, vāco* and *vāg-ina*; *vēc-[ao]*, *vōco* and *vēc-s, vōx (vōcis)*."

"The same is done, when verbs are derived from nouns, where frequently the original form of the noun has been lost, e. g. *sāg-ax* and *sāgire*, *praesāg-us*; *plācidus, plācere* and *plācare*; *mācer* and *mācerare*; *sōpor* and *sōpire*."

As regards the *intensifying of the vowels*, which Mr. Corssen has endeavored to establish for the Latin, in the present work, and which (I., 158, 159) he has tried to prove by an additional number of verbal forms, marked with the apex, but which are not acknowledged, to be long by scholars in general, we are inclined to believe that it will not be admitted to the same extent, even by the members of his own school (that of comparative philology), certainly not with regard to the perfect tense. First of all, the question as to the priority of the aorist (perfect), or of the present tense still remains to be decided. We have, above, declared ourselves in favor of the priority of the aorist; and, if such is the case, the long vowel of the aorist or perfect-stem is not long by intensifying, but long *originally*, and in the imperative stem with its derivatives this original long vowel has been weakened or shortened.

The school of comparative philology teaches, as is well known, that the forms *fōdi*, *venī*, *sēdi*, *lēgi*, must be explained by the reduplicated forms *fōfōdi*, *vevini*, *sesidi*, *leligi*, in which the initial consonant of the second syllable is rejected, and the diphthong or double vowel, thus obtained, is con-

tracted into a long vowel; thus *föödi* into *födi*, *veini* into *veni*, *seidi* into *sédi*, *leigi* into *legi*. The long vowel, in the above perfect forms, is, therefore, not obtained by intensifying, but by the blending of a diphthong or a double vowel. It is certainly true, that we have not many proofs of this process within the Latin language itself, inasmuch as *pēgi*, *pepigi*, *panxi* from *pago*, *pango* is the only form on record, and there the derivation of *pēgi* from *pepigi* is contested; but there are striking analogies of this process in the other Indo-European languages; for instance in the Sanscrit (Bopp II., 482, § 605), *tēnima* for *tetanima*, Old-Germ. *fangen* (to catch), *fi-fang* (I caught), *fiang*, *fieng*; *hangen* (to hang), *hi-hang* (I hung,) *hiang*, *hieng*, and in one of the Italic dialects we find *fefacust*, in which the unaccented *a* of the second syllable, in the Latin language, would naturally pass into *ī*, so that the conclusion, that the Latin *fēci* is contracted from *feici*, is not at all improbable. The long vowel in the words *tēc-si*, *texi* for *tēg-si*, *tēgula*; *rēg-o* [*rēg-si*], *rēc-si*, *rēxi*, *rēgula*, may consequently, be explained without any intensifying of the vowel, either by the vowel being originally long, or it having been made long by reduplication and a subsequent blending of the diphthong. The suffix *si* would have to be regarded, in this latter case, as a later addition to the long syllables *reg-*, *tēg-*—from which, also, *tēg-ula*, *rēg-ula*, are derived. An example of an original length is furnished us by the stem *leg-*, where we find *leg-i*, *lec-tum*, (I., 159), *lēg-[s]*, *lēx*, *col-lēg-a*. We wonder at Mr. Corssen's deriving *illicio*, *lēxi* and *līctor* from the same root, since the former word is derived from *lac-(lacio)*;—from the long *ē* in *illexi*, we are certainly authorized to suppose a form *lēc-*, *lēci*, as *jēci*, *fēci*, *cēpi*, to which, perhaps, at a later period, the suffix *si* was appended; compare the forms *delectare*, *oblectare*, which were marked with the apex. As regards the long *ī* in *līctor* for *lig-tor*, it is derived from *lig-*, without the suffix *a*, as in *relig-īo* (*a checking or restraining from doing evil*); this latter word being formed from the shortened present tense.

[As in the earlier formations of the Latin language, by the rejection of consonants, diphthongs were obtained by prefixes, coalescing into simple vowels, so in the Romance tongues e. g. the Spanish, Portuguese and Italian, *suffixes* were admitted into the aorist-stems, in order to strengthen them, which, either entirely superseded the stem-vowel, or else formed a diphthong with it, or merged with it into one vowel, or finally constituted an entirely new stem with it, e. g. *habere* (to have), perfect *hab-ui*, Span. *hube*, Port. *houve*; the Italian perfect is formed from the vulgar Latin *habio* (comp. I., 302), instead of *habeo*; from *habio* we have a perfect *habii* for *habui*; by transposing *i* we obtain *haibi*, *hebi*, and as the Italians prefer to lengthen their words by position, we get *hebbi*, *ebbi*, c., *venni* for *veni*, from *veini* for *venii*; Lat. *sapio*, *sapui*, Span. *supe*, Port. *sube*, Ital. instead of *sapii*, *saipi*, *sēpi*, *seppi*, etc.; Present subjunctive *sapiam*, Port. *saiba*, Span. *sēpa*; *primarius*, Port. *primeiro*, Span. *primero*].

Among the diphthongs which arose in a more mechanical way by the addition of suffixes commencing with a vowel, to stems ending in one, we find e. g., *vita-is*, *vitai*, *vitae* (of the life), *gnato-is*, *gnatoi*, *gnati*, or dative plural *gnatois* *gnatis*, *natis*; *re-is*, *rei*, *spe-is*, *spei* (of the hope).

Diphthongs which arose by composition, e. g., *ne-uter*, *neuter*, *ne-utiquam*, *neutiquam*;

plous for *ploi-us*, *ecit* for *ejcit*, *reicūt* for *rejcūt*;

conjuncti, *cojuncti*, *counci*, *cuncti*;

Diphthongs, formed by the rejection of *v*, e. g., *Cloelius*, *Cloilius*, *Clovilius*; *nauta* for *navita*; *naufragus* for *navi-fragus*; by the rejection of *i* or *e*, e. g., *noundinum* for *novendinum*, *nounai* for *novenai*, *Nouceria* for *Noviceria*.

Au.

The diphthong *au* has been preserved in many cases, so that even, at the present day, it is heard in the mouth of the

Italians. In other cases, however, it commenced early to be blended into *o*, and more seldom in *u*. Thus, in an inscription, dating from the time of the Punic war, we find *Pola* for *Paula*, and in another which is among the oldest, *Ploti* for *Plauti*, *Plotus* for *Plautus*, and *semploia* for *sempiplotia* (I., 163. 164). According to Verrius Flaccus, the poet *Plautus* was at first called *Plotus*, and Cato, in his work on agriculture, uses *dehorito*, instead of *dehaurito*. Diom. p. 378, says, "*Au syllaba cum 'o' commercium habet, ut cum dicimus 'claustra' et 'clostra,' 'cauda' et 'coda' et similia.*" Still, words in *au* belonged more to the language of the educated, while those in *o* belonged to that of the people. Thus Mestrius Florus, according to Sueton., Vespas. c. 22, rated Vespasian on his pronouncing '*plostra*' and not '*plaustra*;' and on the next day, the pedantic consular was paid back by the witty emperor's addressing him '*Flaurus*,' instead of '*Florus*' (I., 167. 168). From the fact, that in a very old brass tablet of Spoleto we read *Aorelius*, instead of *Aurelius*, Mr. Corssen concludes, that before *au* was blended into *o*, it passed through an intermediate stage of *ao*, on account of this latter sound being nearer to *a*, in its pronunciation, [see our remarks on the pronunciation of the diphthong *ou*]. As regards Mr. Corssen's observation, that the spelling of *ausculari* instead of *osculari*, and of *aurichalcum* instead of *orichalcum* (ὀρεΐχαλκος), could certainly only have been introduced by the learned, we doubt this very much, inasmuch as not a great amount of erudition is required to discover the derivation of *osculator* from *osculum*, *os*; but we think that it has rather been introduced by the unlearned who, in English, would write and pronounce *hof* instead of *of*, and *as* instead of *has* and who, in order to be sure that they write the word '*asparagus*' correctly, spell it '*sparrow-grass*,' in imitation of its popular pronunciation '*spargus*' and '*spargrass*.'

[Concerning the pronunciation of *au*, see the following article.]

OU.

The diphthong *ou*, according to Mr. Corssen (I., 171-176) arose either (as has been observed above) by an intensifying of the vowel, e. g. *Loucina*, *Loucetios*, *loumen*, *pouublicom*, *abdoucit*; or by the rejection of the semi-vowel *i* or *j*, and a subsequent junction of the final *o* of the stem, with the vowel *u* of the comparative suffix, as in *plous* for *plo-ius*, *plouruma*; or by dissolving the semi-vowel *v*, before a consonant, into *u*, with which consonant it came into contact by the rejection of *e* or *i*, e. g. *noundinum* for *novendinum*, *Clouli* for *Clovili*, etc. Mr. Ritschl proves from the inscriptions, that the diphthong *ou* was only in general use, up to the war with the allies, but, in the word *jous* and its derivations it remained as late as the servile war and the war against Sertorius, because in law-documents the spelling of *jous*, *joubeatis*, *joudex*, *joudicio*, after the fashion of the ancestors of the Romans was retained; still, in the very oldest inscriptions, we occasionally meet with '*u*' instead of *ou*. At the time of the Gracchi, the vacillation between the spelling of *ou* and *u* began to be general; for, either *u* was assimilated to the preceding *o* and constituted with it a long *ō*, or else [as a more general thing], *o* was assimilated to *u*, and they both formed a long *ū*, e. g.

<i>ou.</i>	<i>o.</i>	<i>u.</i>
<i>pouublicom</i>	<i>pōplicod</i>	<i>pūplico</i> , <i>pūblico</i> , etc.

The diphthong *ou*, when followed by a vowel, also passed over into *ov*, and either by the assimilation of *o* into *u*, or by the intermediate form *uu*, was changed into *uv*, and, thus, finally into *u*, e. g.

<i>ov.</i>	<i>uv.</i>	<i>u.</i>
<i>soveis</i>	<i>suvo</i>	<i>sūo</i> .

[With regard to the pronunciation of this diphthong, although this is no matter of great consequence, inasmuch as it has not survived in the classic Latin, we hold, that it was pronounced like the English *ou* in *gout* and *doubt*, or the German *au* in *Saus* and *Braus*, that it thus approximated

somewhat to the pronunciation of the Latin diphthong *au*, which, we hold, was pronounced like the English *ou* in *our* or *ow* in *howl*, and like the German *au* in *Laub*. A careful observer will notice that the latter of these sounds, viz., English *ou* in *our* or *ow* in *fowl*, and German *au* in *Laub*, terminates in the vowel *o* in *hole*, and the former, viz., Engl. *ou* in *gout* and *doubt*, and Germ. *au* in *Saus* and *Braus*, in the vowel *û* in *rude*. The Latin diphthong *au*, consequently, was not composed of the sounds of *a* in *far* and *u* in *rude*, but of the sounds of *a* and *o* in *holē*, viz., *ah-ō*. The blending of the diphthong *au* into *o* is, therefore, to be understood in this manner, that the first member of the diphthong, viz., *a*, was absorbed by its second member, viz. *o*; and the spelling *Aorelius* instead of *Aurelius* shows, that, at the time, from which this spelling dates, the second member of the diphthong already preponderated, so that its true nature, viz. *o* had become apparent. Before the dental *d*, *au* seems to have been pronounced like the diphthong *ou*, thus like the English *ou* in *gout* and *doubt*, for whenever *au* is followed by *d*, as in *raudus*, *fraudo*, *claudio*, it is not blended into *o* but into *u*. In the diphthong *ou*, which really terminated in *û* in *rude*, the first member was assimilated into *û*, and at the time, when the second member of the diphthong began to preponderate, whenever it was followed by a vowel, its affinity to the semi-vowel *v* became developed, and it was changed into *v*, viz., *sovereis*. As regards the blending of *ou* into *ō*, which seems to conflict with our theory, we hold, that the absorption of the first member of the diphthong by the second was not effected in an instant, and, thus, for a considerable time after the two constituent members of the diphthong had ceased to be pronounced separately, there was a strong admixture of the first member in the sound produced, which was only gradually reduced by the superior power of the second member, and in some diphthongs, as we shall show hereafter, it was never completely overcome: thus, after the diphthong *ou* in *poublicom* had coalesced into a simple sound, the mixture produced was at

first very strongly tintured by *ō* in *hōle*, hence *pōplicod*, but, afterwards, when the mixture had cleared off, we find *pūplico*, *pūblico*. Moreover, it is to be remarked that such instances where *ou* appears blended into *ō* are very rare, and that the usual form is *ū*.]

EU.

The diphthong *eu*, according to Mr. Corssen (I., 176, 177), occurs least frequently in the Latin language. Above we have mentioned the form *Leucesie*, which is found in the 'Carmen Saliare,' (i. e. the old hymn of the Roman priests of Mars, who celebrated the beginning of spring by a procession, with dancing and singing,) and we have stated that it originated from a short *ū* which was intensified into *ou* and *eu*.

But even the surname *Lucius* must have originally sounded *Leucius*, as it is spelled Λευκιος by the Greeks; it is, moreover, found in names as *Teurano*, *Teurisci*, *Leuvius*, *Teudasio*. This diphthong has, also, been formed by composition, as we have seen above, e. g. in *ne-uter*, *ne-utiquam*; and by rejection of the final *e*, as in *neu* for *neve*, *seu* for *sive*. The remaining words which are spelled with *eu*, are *ceu*, *heu*, *eheu*, and those originally Greek.

[As regards the pronunciation of this diphthong, it, certainly, was not pronounced like the English *eu* in *feud*; for this latter sound was expressed in Latin by *ju* in *jus* or *judico*. It seems to us that it was rather pronounced like the diphthong *ei* in *height*, with this difference, however, that instead of terminating in the slender *i* in *machine* or *caprice*, as in *height*, it ended in the intermediate sound between *i* and *u*, which we noticed above, pag. 76, and which, we hold, resembled the French *u*. In this manner we obtain the sound which is given by the Germans to their diphthong *eu* in *neu*, *Leute*, etc.]

A I.

The diphthong *ai*, as early as the time of the Syrian war, was weakened into *ae*, and this sound has prevailed in the language since the time of the Gracchi. At an early time, as is shown by Mr. Corssen, this *ae* was changed in the mouth of the country-people into *e* [*e* in *then*, or *a* in *fate*]; this was the rustic pronunciation at the times of Lucilius and Varro, and ever afterwards. This sound of *e* (*a* in *fate*) was developed more and more in the living tongue of the entire people, after the first period of the empire, and, about the third century after Christ, it had become universally dominant. In some cases it was, afterwards, obscured into the sound of *i* inclining to *e*, which was even shortened into *ĭ*.

The diphthong *ai* appears both in stems and in suffixes, when the endings of cases, beginning with a vowel, were subjoined to stems, ending in a vowel. It is found in stems in the following words, dating from the oldest times, which are mentioned by Mr. Corssen, among many others, e. g., *praidad* for *praedā*, *aidiles* for *aediles*, *aire*, *airid* for *aere*, *quaistores* for *quaestores*, *aiquom* for *aequum*, *quairatis* for *quaeratis*, *Gnaivod* for *Cnaeus*, *Caicilio* for *Caecilio*, *Aimilius* for *Aemilius*, *Aigius* for *Aegius*. The forms *conquaeisivei*, *Caecicius*, *Caecicianus*, *Caecilius*, *Caedia* indicate the transition from the full sound of both members of the diphthong to that of *ae* [*e* in *there* or *ai* in *pair*] which as Mr. Corssen has observed above, at an early period, in the mouth of the rustic population passed over into the simple sound of *e* [*a* in *fate*].

The diphthong *ai* appears in the time before Augustus, as the suffix of cases or as a part of it in the genitive, locative and dative of the following words; in the genitive [for which Mr. Corssen always writes *genetive*] and in the locative, e. g. *fameliai* for *familiae*, *Aecetiai* for *aequitiae*, *tavernai* for *tabernae*, *Belo[n]ai*, *Menervai*, *pulcrai* for *pulchrae*, *vitai* for *vitae*, *Dvelonai*, *Feroniai*, *coloniai*, *restinctai*, *Appiai*

Ofilliai, Rufui; in the dative case, e. g. *Caesiai, Dianai, Clodiai, Glycerai, Luciai, amantissumai* (I., 178, 179).

From the times of Augustus and the following emperors, we find the following instances of the genitive and locative [in inscriptions], e. g. *patriai, Asiai, Syriai, provinciai* (Locat.) *Romai, Raitiai, divinai, Nicostratai, Nipiai, Tintorai, viai, Dertosai*, (Locat.), *Calidiai, Fortunai*; of the dative case, e. g., *Agrippai, coloniai, Beneventanai, Sentiai, maxsumai, Uttediai, quartai, Antoniai, Augustai, Juliai, Agrippinai, invictai, Picai, reipublicai, Octaviai, Calidiai, Priscai, Bonai, deai, Secundai, Domitiai, Cassiai, Maximai, Statiai, Severai, Sextiliai, Chrestai, Ulpiai, Scitai, Pilumenai, Semproniai, Gallai, Petronai, Tanniai, Pobliciai, Atticai, Rufriai, Ezoratai, Manliai, Didiai, Egnatiai, Flaviai, Philuminai, Vitelliai, Siatiai, Cerriai, Magiai, Muniai, Probai*, (I., 180, 181).

From the very latest times of the empire, even, Mr. Corssen adduces, *coloniai* for the genitive and locative, and *Artemai, cojugai, Januarii, Mammulai* for the dative (I., 181).

Less frequently Mr. Corssen finds the diphthong *ai* in the ending of the nominative plural of a-stems; still he mentions *haice, tabelai, datai, eai, literaive*, in inscriptions from the time of the empire, *quai, arai*.

The spelling *ai*, however, even from the time of the *senatus-consultum de Bacchanalibus*, that is from the time of the Syrian war, does not seem to have been the only one in use, but we frequently find with it the spelling *ae*, not only in the same inscriptions, but even in the same word in different places; also in inscriptions from the time of the empire. In the law documents from the times of the Gracchi to the end of the republic, the spelling *ai* occurs only in a few cases, but from the time of Augustus, and, especially of Claudius, it again appears more frequently principally in the dative, less frequently in the genitive, and only very rarely in any other case.

From these facts Mr. Corssen concludes (I., 182, 183),

"If since the time of the Macedonian and Syrian war, there is a vacillation in the spelling of *ai* and *ae*; if, from the time of the Gracchi to that of Cæsar, the spelling *ae* prevails in the completest and most important monuments, the Romans must have begun to pronounce *ae* [*e* in *there* and *ai* in *pair*], as early as the second century before Christ, and this pronunciation must have been universally adopted during the rise of the Roman literature. Lucilius, indeed, proposes to write *ai* in the genitive and dative singular, and *ae* in the plural, but the above-named law-documents indicate that his proposition was not adopted. It is, however, very evident that, at the time of Lucilius, it was universally pronounced like *a* in *fare* or *ai* in *pair*, and that he merely wished to establish this distinction for the eye."

The same weakening of the diphthong *ai* into *ae* is shown in inscriptions in the genitives of female names in *aes* [first perhaps pronounced *ah-ēs* as a diphthong], e. g. *Pescenīaes*, *Liaudicaes*, *Heraes*, *Dianaes*, *Antonīaes*, *Statiliāes*, *Octavīaes*, *Pylaes*, *Faenīaes*, *Secundāes*, *Julīaes*, *Flaviāes*, *Cervīaes*, *Corneliāes*, *Calaes*, *Agrippināes*, *Lepidāes*, *Musaes*, *Helenaes*, *Saturnināes*, *Midaes*, *Proculāes*, *Aquilīaes*, *Basillaes*, *Decimīaes*, *Priscaes*, *Faustinaes*, *Licinīaes*, *Livillaes*, *Sabidīaes*, *Sextiliāes*.

Mr. Corssen explains this genitive in *aes*, together with that in *as* which was in use among the oldest poets, and that in *ai* which we have mentioned above, by saying, that all three were derived from the original form *a-is*, which consists of the mark of the genitive, viz. : *s*, affixed to the stem ending in *a* by means of the copula *i*. This form *a-is*, he says, was originally pronounced in two syllables, viz. : *ā-is*, from *ā-is* was first obtained, by the dropping of *s*, the form *āi*, which we find in Ennius, Plautus, Terence and Virgil in words like the following, viz. : *longāi*, *aquāi*, *terrāi*, *comediāi*, *materiāi*, *aurāi*, *pictāi*, etc., and by their coalition into a diphthong was produced the usual *ai*, which was afterwards weakened into *ae*; or else the sign of the genitive, viz. : *s* was preserved, and

the vowels *a-i* were blended into *ae*, so as to form the genitive ending *aes*; or, finally, the copula *i* was rejected, and the genitives in *as* took their origin, e. g., *terras, escas, deivus, Corniscas, monetas, Alcumenas, Latonas, fortunās, vias*, and *familias* [which afterwards, survived in the forms *pater-familias, mater-familias*, etc.] (I., 184).

[We have nothing to say against this explanation of the genitive in *as*, but we think, that it may just as well have arisen by the simple affixing of the sign of the genitive, viz., *s*, to the final *a* of the *a*-declension which was originally long; comp. Bopp. Vergleich. Gramm., § 192, p. 392. And as regards the genitive in *aes*, which, according to our opinion, continued in the mouth of the people, but, like *ae* in general, was weakened into *e* (as is shown by inscriptions of the third century after Christ, e. g. *provincies, restitutes, Aginees, Brivines, Julies, Veranilles, Prisces, Selentioses, Victories, Benignes, Egnaties, aeternes, Minerbes, Faustines*, I., 188), it may just as well have been a weakened *a*-form of the Sanscr. *āy-ās*, e. g. *āsvāy-ās, equās* (*equa-as, equa-es*), of *the mare*.]

"Still," Mr. Corssen continues (I., 189), "besides this genitive in *aes*, we also find, in contemporary inscriptions, forms in *ae*, and, indeed, when two words agreeing with each other, either in the genitive or dative case, immediately follow one another, we find one written with *AE*, and the other with *E*, e. g. in the dative, *Vejanae Rumne, Impiae Juste, Caesia Prime, Munatie Modestine, filiae dulcissime, Anniae Victorine, Tiliae Lucide, bonae femine, Cominia Felicissime, Pifigiliae Prime, Polliae Prime, Otaciliae sanctissime*; in the genitive, *mire sapientiae, Coccejae Severe, Vitae nostre*; in the dative, again, *Nepotille filiae, Fructuose filiae, Elate Juliae, Feliculae filiae*, etc.; and in the genitive, *bone memoriae, Caediciae Prisces* (I., 189). Mr. Corssen says, that in thus retaining *ae* in one of the two words, they were perhaps [?] actuated by an unconscious desire not to destroy the ending of the case in both words;

still, this desire, even, in the course of time, was no longer sufficient to preserve *ae*, as we see from the following examples : in the dative case, *Julie felicissime*, *Lucerine juste*, *Primille filie*, *Tulliane Marcelle*, *Saecidie Fortunate*, *filie dulcissime*, *filie benemerentissime*, *Ulpie Severine*, *femine dulcissime*, *Mucassenie pientissime*, *sanctissime*, *pientissime*, *pie nate*, *Decimine alumne*, *Domine filie*, *mee pudicissime* *Jovine Domitiae*, *Varene Marcelle*. Nevertheless, as late as the time of Constantine the Great, when the diphthong *ai* had long passed into *e*, there were still some people who wrote *ai*, in the old fashion, as in *coloniai*.

In the older Oscan, also, the decided i-sound of the diphthong was weakened into an intermediate one between *e* and *i*, [we deny that the *i* of the diphthong *ai* ever had a decided i-sound; see our remarks on the pronunciation of this diphthong at the end of this article,] which in the younger Oscan became *æ*; Old Osc. *Herukinae* (Lat. *Erycinae*), Old Osc. *viai*, locat. (Lat. *viae*—in *via*), Old-Osc. *meftai*, locat. (Lat. *mediae* = in *media*), New Osc. *Bansae* (Lat. *Bantiae*), New Osc. *suae*, Old Osc. *svai*, etc. (I., 191). In the Umbrian the diphthongs *ai*, *oi*, *ei*, with a few exceptions, have been blended into *e*, e. g. Umbr. *Kvestur*, Lat. *quaestor*, *quaistor*, Osc. *kvaistur*; in the dative singular, Umbr. *ase*, Lat. *arae*, etc.; in the ablative plural, Umbr. *tekuries*, Lat. *decuriis*. Umbr. *asecetes*, Lat. *insectis*, which correspond to the Latin *nuges* for *nugais*; also, Umbr. *pre*, Lat. *prae*, Old-Latin *prai*, Osc. *prae*; Umbr. *pre-pa*, Lat. *prae quam*; Umbr. *prehabia*, Lat. *praehibeat*, *praebeat*; Umbr. *sve* (Lat. *si*), New Osc. *suae*, Old Osc. *svai*; Umbr. *svepis* (Lat. *siquis*), New Osc. *suaepis*, etc., cfr. Aufrecht and Kirchhoff, Umbr. Sprachdenkm., p. 46. 111, 114, 115, 161; Corssen, I., 191. In the Volscan, also, *e* is found instead of *ae*, *ai*, e. g. Volsc. *Vesune*, Lat. *Vesunae*, *Vesunai*; Volsc. *se*, Umbr. *sve*, Lat. *si*, New Osc. *suae*, Old Osc. *svai*; Volsc. *sepis*, Umbr. *svepis*, New Osc. *suaepis*.

The diphthong *ai*, however, was not only obscured into *e*

but also into *i* in *machine*, as in the ablatives of a-stems, e. g. *viis* for *viis*; also in the preposition *prae*, in which the old form *prai* was not only obscured into *prae* and *pre*, but also into *i*, e. g. in *pri-us* for *prai-ius*, *pri-mus* for *prai-mus*, *pri-scus* for *prai-us-cus*, *pri-die* for *prai-die*, *pri-dem* for *prai-dem*, *pri-vus* for *prai-vus*.

In compounds the diphthong *ai* is weakened into *i*, e. g. *collido* from *laedo* (*laido*), *occido* from *caedo*, *iniquus* from *aequus*, *inquiero* from *quaero*, *existumo* from *aestumo*, *distisum* and *pertisum* from *distaesum* and *pertaesum* (*taedet*). The sound of this *I* was the clear sound of *i*, inclining to *e*, which in the ante-Augustan age was expressed by *ei* as in *vieis*, *taboleis*, *incoleis*, *causeis* (I., 193). Thus the original Italic suffix *aio*, which still appears in the Osc. *Pompaianus*, in Italic names dwindled down to *aejo*, *eijo*, *ejo*, *ijo*, *ijo*, as well as to *aio*, *aeo*, *eo*, *io*, *i*, e. g. *Annaejus*, *Anaia*, *Annaeus*, *Annejus*, *Anneus*, *Annius*, *Annius*. So, in the third century after Christ, the same name is written *Mamaea*, *Mammea*, *Mammia*. The diphthong *ai*, therefore, could be reduced even to a short *i* (I., 193).

[As regards the pronunciation of the diphthong *ai*, it is no matter of immediate importance for us to know it, inasmuch as, in the classic Latin, it has universally passed over into *ae* or *e*, and in a few instances into *i*, and is only left in *ait*, *ain*, etc., where it is no diphthong, but is obtained by the rejection of *j* or *g* and pronounced in two syllables. Still, it is our opinion, that it was sounded like the English *ai* in *aisle*, and the German *ai* in *Kaiser*, while the diphthong *ei*, so long as it was a diphthong, was probably pronounced like the Greek *αι*, i. e. like the English *ei* in *height*, or like the German *ei* in *Seite*. Our grounds for this assumption are these, that in the diphthong *ai* in *aisle*, and Germ. *ai* in *Kaiser*, the last sound in which the diphthong terminates is not *i* in *machine* but *e* in *ell* (or *a* in *ale*), and the diphthong *ai* in reality is composed of the two sounds *a* in *far* and *e* in *ell*, viz. *ah-ē*, although in Latin, Greek and German and in the English

word *aisle* it is spelled *ai*; while *ei* in *height* really terminates in *i* in *machine* or *caprice*. In taking this view of the matter, we can very readily see, why the diphthong *ai* in Latin was generally weakened into *ae* and into *e* (*e* in *ell* and *a* in *ale*), and the diphthong *ei*, probably, into a long *i* in *caprice*, and, especially, into the intermediate sound between *e* and *i*; for in both these cases, as in *au* and *ou*, the first members of the diphthongs were simply absorbed by their second members. Thus, when the second member of the diphthong *ai* began to preponderate and to manifest its true nature, viz. *e* in *ell*, the Romans no longer spelled it *ai* but *ae*, and when the process of absorption was consummated, it was not only spelled *ae*, but also *e*. The reason why the Romans still continued to spell it *ae*, even after the vowel *a* had been absorbed by *e*, was this, because in the first period of absorption, in the mouth of the educated, there was still some trace of the original *a* in *far* left in the *e*, which gave to it the peculiar sound of *ai* in *pair* and *e* in *there*, and distinguished it from the regular Latin *e*, which was pronounced like *e* in *ell* and *then*, and *a* in *fate*. In the mouth of the common people, however, it turned early into the sound of *e* in *ell* and *then*, or *a* in *fate*, and during the decline of the Roman empire, this pronunciation became universal.—As regards the diphthong *ei*, Mr. Corssen has proved conclusively (see article on diphthong *ei*), that, wherever it is found in the inscriptions handed down to us, it is no longer a diphthong, but represents the intermediate sound between *e* in *ell*, and *i* in *is*; he expresses a belief, however, that in the oldest times, from which there are no records left, it was certainly a diphthong. This is our belief, and our argument in favor of its having sounded like *ei* in *height* is drawn by analogy from the other diphthongs; for if *ae*, which is an intermediate sound between *a* in *far* and *e* in *ell*, is derived from the diphthong *ai* or rather *ah-ē*, and the fuller and obscure sound of *o* (by which Mr. Corssen can mean no other than that of *o* in *off*, in which there is a slight admixture of *a*

in *far*), is that, which is obtained by the absorption of the diphthong *au* or rather *ah-ō* (see article on *o*, pag. 83), we conclude that the intermediate sound between *e* and *i*, which has subsequently been represented by the sign *EI*, in most cases originated from an absorption of the diphthong *ei* (Engl. *ei* in *height*), and that this very intermediate sound, represented by *EI*, exhibits the diphthong *ei* in its first stage of absorption, before the second member, viz. *i*, had fully gained the ascendancy, just as *ae* represented the diphthong *ai* in its first stage of absorption, before the second member, viz. *e* in *ell* or *a* in *ale* had perfectly absorbed the *a*. After a diphthong had once been reduced to a simple vowel, its sound, like that of any other simple vowel, could be still more modified and obscured; thus the diphthong *ai*, after being absorbed by its second member *e* in *ell*, could even be obscured into *i*, as we have seen above.]

Oi.

The diphthong *oi* was reduced, at an early period, into *oe*, but it remained still intact at the time from which our oldest inscriptions have been handed down to us. In these inscriptions we find the following forms, viz., *oino, oina, oenus* for *unus, oinvorsei* for *universi, oenigenos* for *unigenos, noenum* (*ne unum=non*), *plourume* (*plurime*), *ploera* (*plura*), *foideratei* (*foederati*), *foidere* (*foedere*), *moeniundae, moenio* (*munio*), *admoenio, conmoenio* (*communio*), *comoinem* (*communem*), *moinicipleis* (*municipiis*), *moinicipiove, immoenis* (*immunis*), *Poinicia, Poenicas* (*Punicus*), *poeniceo, poeniceum, oitile* (*utile*), *oisus* (*usus*), *oetantur, oeti* (*uti*), *oesus* (*usus*); *coiravit, coeravit, coiraverunt, coeraverunt, coerarunt, coiravere, coeravere, coiraver.* *coeraver., coeret, coeratori, coerandi* all from *curo*; *moiro, moiros, moer*[*um*], *moeros, moeris* (*muris*); *coiperit* (*coeperit*); *loidos, loedos* (*ludos*); *loebertatem* (*libertatem*); *loebesum* (*liberum*), *Coilius, Coilio, oboedientem*. Thus

in very old monuments we even find *oe* instead of *oi*. The restorers of the 'Columna Rostrata' of Duellius would certainly not have written *Poenicas*, unless they had known that at the time of the Punic war it was thus written. On the other hand, the two oldest of the epitaphs of the Scipios and the 'senatusconsultum de Bacchanalibus' only show *oi*. After the war of the Cimbri and the time of Marius the spelling *oe* is also found in law-documents, superscriptions, epitaphs and other public writings, without superseding, however, entirely the old spelling *oi*; for, although this became gradually obsolete, it is still found occasionally in inscriptions, dating from the time of Cæsar. The diphthong *oi* was therefore, in stem-syllables, even at the time of the Punic war, so similar to the sound of *oe*, that people were doubtful whether to write *oi* or *oe*. In the vulgar language *oe* was pronounced. [Mr. Corssen means here the sound of *oe* in German, which sounds like *eu* or *oeu* in French, and somewhat like *i* in *bird*, or *u* in *hurt*], while in documents and epitaphs the old-fashioned spelling *oi* was retained, as is shown in the 'Senatusconsult. de Bacch.,' and the epitaphs of the Scipios. Hence Lucilius wrote *noenum*, Accius *moeros*, *immoenos*, *oboedire*,—with respect to this last word, and also, *coirare*, *coerare* (*curare*), see Corssen, I., 197.

As regards the diphthong *oi*, in the terminations of the inflections, it is preserved to us in the datives *populoi* [δῆμος for δημῶι, δῆμοι, ὄπποι for ὄπποι, cf. πύλλοι,] *Romanoi*, *quoi* for *cui*, *hoi-ce*, *hoi-c* (*huic*). By the interpretation of Vahlen, the form *Mettoi Fubettoi* in Ennius, is also admitted now as a dative. The oldest form of the ablative and dative plural of o-stems, in the Latin language, is preserved to us in a very old inscription, in *cnatois suis*. But in the very ancient 'Carmen Saliare' we find a nominative plural in *oe*, viz., "*Pilumnoe poploe*," which is interpreted, "*Romani pilis assueti*;" there the nominative *oi* is not only weakened into *oe*, but it has likewise lost the *s* of the plural; we, also, find "*Fescemnoe*" which according to Festus, means "*qui de-*

pellere fascinum putabantur." In another place, moreover, we find *oloēs* for *illis*, *privicloēs* for *priviculis* (*privis*). The weakening of *oi* into *oe* in the terminations of inflections thus commenced in the earliest times. But the process of weakening was carried on still further and *oi* was even obscured into *u* and *i* (in the suffixes of cases it was weakened into *i*), e. g.

<i>oi.</i>	<i>oe.</i>	<i>u.</i>
<i>loidos,</i>	<i>loedos,</i>	<i>ludunt, ludeis,</i>
<i>oino,</i>	<i>oenus,</i>	<i>unum,</i>
<i>ploirume,</i>	<i>ploera,</i>	<i>plures,</i>
<i>moinicipium,</i>	<i>inmoenis,</i>	<i>municipiis,</i>
<i>oitile,</i>	<i>oetier,</i>	<i>utier, etc., (I., 199, 200).</i>

As early as the time of the Gracchi, we find *ludum* together with *coiravit*, but we meet again with *loidos* and *loedus* as late as the war of the Cimbri; in the '*lex Thoria*' we find *oina*, *oitantur*, together with *unum*, *unius*. In a law of extortion of the same year we read *municipii*, while the Thorian law has preserved *moinicipieis*, *moinicipiove*. In inscriptions dating from the times of the Jugurthan war, we find *procurandae*, *coeraverunt*, *coiraverunt*. On stones of Capua are written *murum*, and likewise *coeraver.*, *loedos*; on inscriptions dating from the time of Cæsar, *ludus*, *municipio*, together with *moerum*, *coeravere*, *foedere* and *foidere*. Hence from the times of the Gracchi *u* is found together with *oi* and *oe*, and at the period of the war with the Cimbri the vacillation has reached its utmost point. Afterwards *oi* and *oe* rapidly became obsolete and *u* is used in their stead; the sound *oe* is retained in the classic Latin only in a very few words, e. g. in *moenia*, together with *munire*, *poena* with *punire*, and also *poenire*, *Poenus* and *Punicus*, etc.

The transition of *oi* into *u* Mr. Corssen explains by means of the dative-form *Janui* which was found by Varro in a law from the time of the kingdom. In this form he regards the final *o* of the stem as assimilated into *u*, through the follow-

ing *i*, because the sound of *u*, according to the position of the organs of speech is nearer to *i* than *o*. In the same manner he holds, *hui-c* was obtained from *hoi-c* and *cui* from *quoi*. The combination *ui*, afterwards, merged very easily into *u*: this he proves by the genitives of the *u*-stems, as *victus*, *gradus*, *anus*, *ritus*, *quaestus*, compared with the older forms *victuis*, *graduis*, *anuis*, *rituis*, *quaestuis*.—Mr. Corssen admits that the weakening of *oi* into *u* through the mediate form of *ui* appears only in the above three forms of the dative, viz., *Janui*, *huic*, *cui*, and that usually before passing into *u* it is changed into *oe*, from this into the intermediate sound between *i* and *u*, viz., French *u* or Germ. *ū*, and thence finally into *u*; but we object to his mode of explaining the transition of *oi* into *oe*. Mr. C. says that *i* in *oi*, through the influence of the preceding *o* became assimilated into *e* (Engl. *e* in *ell*), because, according to the position of the organs of speech, *e* in *ell* is more intimately related to *o* in *hole*, than *i* in *is* or *machine*; and that *i* in *is*, after it became thus assimilated to *o* in *hole*, became blended with it into the intermediate sound between *o* in *hole* and *e* in *ell*, viz., Germ. *ö* or French, *eu*. This explanation sounds plausible, but we object to it on the following grounds:

Mr. Corssen, throughout the whole discussion of the diphthongs, labors under the general disadvantage of regarding the sounds of the vowels by which they are represented in writing, as the constituent elements of the diphthongs themselves. It is natural to think so, but a careful analysis of the several diphthongs teaches us otherwise, and especially so in the present instance. The vowels *o* in *hole* and *i* in *is*, have no share whatever in the sound of the diphthong expressed by *oi* in *toil* and *oy* in *boy*. The first member of it is *a* in *all* or *o* in *off*, and the second member *e* in *ell*; such is the sound of *oi* in English, and there is no reason to suppose that it sounded differently in Latin. Now, when, in the course of time, the second member of the diphthong preponderated, it was natural that the Romans should no

longer spell it *oi* but *oe*, and after it had entirely absorbed the first member, the spelling *oe* was retained, in order to show that the sound obtained was not a clear *e* in *ell* or *a* in *ale*, but still partook somewhat of the nature of its first member, *a* in *all*; as has been the case with all the other diphthongs. The sound of *oe*, which was produced in this manner, was that of the German *ö*, or the French *oeu* and *eu*, the nearest approximation to which, in English, is the sound of *i* in *bird* and *u* in *hurt*. After continuing for some time in this state, the process of weakening was carried on still further, and *oe* (Germ. *ö*, French *oeu*) was obscured into the intermediate sound between *i* in *is* and *u* in *rude*, which exists in the French *u* and Germ. *ü*. This intermediate sound, which could not be well represented by the Romans in writing in all words where *oi* was weakened into *u*, was spoken and heard, according to Mr. Corssen, at the time of the Gracchi and the war with the Cimbri; hence the great confusion of *oi*, *oe*, and *u*, at that time; even as the Greek *v*, which had a kindred sound, was not only represented by *v* or *u* and *i*, but also by *oe* in *Hoelas*, *soenephebis*, *Froegiae φρυγίας*. From this intermediate sound which we will represent by the German *ü*, the diphthong *oi* was finally weakened into *u*.—With regard to the sound of *a* in *all*, which we may represent by the Swedish sign *ä*, that of *oe* (Germ. *ö*, French *eu*), and *ü* (French *u*), we may observe that they are related to each other in the same way as *a* in *far*, *e* in *ell*, and *i* in *is*; and that just as well, as *a* or *ai* could be weakened into *e* and thence into *i*, so also *ä* or *oi*, could be obscured into *oe* or *ö*, and thence into *ü*, from which, finally it passed over into *u* in *rude*.

The whole process by which the diphthong *oi* was weakened into *u*, may thus be expressed by the following scheme:

<i>ploira</i> ,	<i>ploera</i> ,	<i>plüra</i> ,	<i>plura</i> ,	conf. Ital.	<i>plurale</i> ,
<i>oisus</i> ,	<i>oesus</i> ,	<i>ūsus</i> ,	<i>usus</i> ,	" "	<i>uso</i> ,
<i>moiros</i> ,	<i>moeros</i> ,	<i>müros</i> ,	<i>muros</i> ,	" "	<i>muraglia</i> ,
<i>coiravit</i> ,	<i>coeravit</i> ,	<i>cüravit</i> ,	<i>curavit</i> ,	" "	<i>curö</i> .

The diphthong *oi*, however, was not only weakened into *u*, but even in the earliest times was reduced to *i*, e. g. *vicus* together with *oikos*, *vinum* with *oivos*, *fidus*, Enn. Varr. *foedus*, *foidus*. The old superlative forms *pl-us-ima*, *pl-is-ima*, *plur-uma*, *pl-o-ir-ume* are all descended from the original form, *pl-o-ius-uma*; the form *plisima*, however, is most immediately derived from *ploisima*. Moreover, the diphthong *oi* was obscured into *i*, in the most ancient times, in the cases of the o-declension. Upon old Latin earthen vessels, probably before the first Punic war, we find the genitive forms *Saturni*, *Volcani*, *Keri*, *Pomponi*; upon the very old inscription of the 'columbarium' of the Vigna Somaschi, *kaili* for *coeli*, and on the epitaphs of the Scipios, *Barbati* (I., 202, 203). The letter *I* of these forms is the intermediate sound between *I* and *E*, which was also rendered by *EL*. This sound, therefore, arose from *oi*, in all instances, where it occurs in the termination of cases of o-stems, e. g.

Gen. Sing. *populei*,

Nom. Plur. *oinvorsei*, *plourume*, *plurimi*,
libereis, *Modies*, *ministris*,

Dat. Plur. *libreis*. *liberis*,

Abl. Plur. *soveis* *suis* (see diphthong *Ei*).

Compare these cases with those forms, where the original *oi* was preserved or simply changed into *oe*, e. g.

	<i>oi</i>	<i>oe</i>	<i>e</i>	<i>ei</i>	<i>i</i>
Nom. Pl.		<i>pilumnoe</i> , <i>plourume</i> , <i>oinvorsei</i> , <i>universi</i> .			
		<i>poploe</i> , <i>modies</i> , <i>libereis</i> , <i>magistris</i> .			
Dat. & } Abl. Pl. }	<i>suois</i> , <i>oloes</i> ,		<i>soveis</i> , <i>suis</i> ,		
	<i>cnatois</i> , <i>privicloes</i> .				

From these schemes it is made very evident through what changes the declension of o-stems has passed since the most ancient times, before the original Italic forms of the genit. sing. [*o-jus*, *o-jis*] *o-is*, nom. plur. *o-is*, dat. & abl. plur. *o-is*,

had dwindled down to the forms *i*, *-i*, *-is*, *-is*, which are exhibited in the classical period of literature.

[The change of the diphthong *oi* into *i*, Mr. Corssen, again explains by the assimilation of *o* into *u* before *i*, as in *Janui*, *huic*, *cui*, and the subsequent merging of *ui* into *i*, as in *quaesti*, *senati*, *parti*, for *quaestuis*, *senatuis*, *partuis*.—To this explanation we object on the following grounds, viz, that, after the vowels *o* in *hole* and *i* in *is* had become merged in the diphthong *oi*, they lost their original sound, inasmuch, as the diphthong *oi*, upon being analyzed, no longer presents to us the sound of *o* in *hole* and *i* in *is*, but those of *a* in *all* and *e* in *ell*, and, that, inasmuch, as all the modifications of the diphthongs were brought about in the living language of the people, where, in the diphthong *oi* or rather *d-ē*, the vowels *o* and *i* were no longer contained, we must give up the idea, that, previous to the absorption of *o* by *i*, it was changed into *u* by the influence of the latter. The only way in which *o* can be imagined to have been assimilated to *u* by the following *i*, is, by supposing, that, in the oldest period of the language, the vowels *o* and *i* had not yet merged into a diphthong, but were pronounced separately, in two syllables. This seems also probable in the case of the dative singular; for while in all the other cases of the *o*-declension, the diphthong *oi* appears obscured into *i*, in the dative singular alone we find *o*, in the majority of cases, *ui* in the three forms *Janui*, *huic* *cui*, and *i* in a few words only, as in *illi*, *solī*, *ulli*, etc. The dative ending in *o*, we accordingly explain in this manner, that, before the vowels *o* and *i* had coalesced into a diphthong, the vowel *o* had gained such a preponderance, as to assimilate to it the following *i* (comp. the Greek 'iota subscript' in *δῆμος* for *δῆμοι* [ωι], *ἄνθρωποι* for *ἀνθρώποι* as in *πίπλημι*, round about.) For the dative in *ui* we accept Mr. Corssen's explanation with this restriction, that the assimilation of *o* into *u* took place before the vowels *o* and *i* were merged into a diphthong; and in the case of the dative ending in *i*, we also admit, that *ui* was blended into *i*, after it had first passed, according to Mr.

Corssen, through the intermediate form *ũ*. We are also willing to admit this explanation in the case of *vicus* (*αἶκος*), *vinum* (*αἶνος*), but in all the other cases of the o-declension, with the exception of the dative case, viz., in the genitive singular, and in the nominative, dative and ablative plural, we maintain that the vowels *o* and *i* had merged in a diphthong, and, consequently lost their original sound; in proof of which we adduce the following forms, viz., *pilumnoe*, *poploe*, *oloes*, *privicloes*, where the diphthong *oi* appears in its first stage of obscuration. The process itself in which *oe* was further developed into *i*, we explain in the following manner: After the second member of the diphthong *oi* or rather *ā-ē* had absorbed the first member and produced with it the mixed form *oe* (Germ. *ō*, French *oeu* or *eu*) in stems, through *ũ*, it was generally weakened into *u*, (see page 114), but in the endings of cases and in a few stems, it succeeded in ridding itself completely of the admixture of the first member; hence were produced the forms *ploirume*, *modies*, and the stems *obedire* for *oboedire*, *pomerium* for *postmoerium*; also *caelum* for *coelum*, *caeruleus* for *coeruleus*, and, in the latest period of the Latin, in all those words where the diphthong *oi* remained in its first stage of obscuration, viz., *coelum*, *coena*, *foedus*, *foetidus*, *pœnitet*, etc., where the sound *oe* was universally changed into that of *e* in *ell*. In the endings of the inflections however, the process of weakening was carried on still farther, and through the intermediate sound between *e* and *i*, viz., *EI* in *oinvorsei*, *libereis*, *soveis*, the diphthong *oi* was finally weakened into *i*, as in *universi*, *ministri*, *suis*, etc.; thither these words were also followed by a few stems, viz., *liberum* for *loebesum*, *libertas* for *loebertas*, *fidus* for *foedus*, *foidus*.]

From this investigation we see, that the diphthong *oi* has been weakened into *oe*, in the earliest times, in the endings of inflections, and, after the Punic war, also in stems. The obscuration of *oi*, through *oe*, into the intermediate sound between *e* and *i*, which, in the oldest times, was expressed

either by *I* or *E*, in the more recent times by *EI*, and in the latest times by *I*, dates back to just as early a period. The further obscuration of this diphthong into *u*, in stems, is of a later date; it had already begun at the time of Plautus, it was spread more and more during the period of the Gracchi and the war with the *Cimbri*, and seems to have become generally prevalent soon after this time, while *oe* was retained only in a limited number of words. In the *later Latin vulgar tongue* this *oe* was finally reduced to a clear *e* in *ell*, and as such passed over into the modern Romance tongues.

EI.

The results of the investigations of Mr. Ritschl with regard to the pronunciation of the diphthong *ei*, Mr. Corssen reports in the following words :

"The sound represented by *EI*, except in the cases of *e*-stems, has proceeded from the diphthongs *ai*, *oi*, *ei*, and from a long *i* proper; but, as far as our knowledge of the Old-Latin reaches, it is nowhere any longer a *diphthong*, in which the first member is the sound *e*, and the second that of *i*, but it is simply an intermediate sound between *e* and *i*; hence, also, in the *oldest writings* it is marked both by *E* and *I*. In the *older language* this vowel inclined more to the sound of *E* in *ell*, and so it was still sounded at the time of Augustus, and even later, in the mouth of the inhabitants of the country. In the mouth of the educated, however, during the classical period of the Roman literature, it was pronounced more like *I* [in *machine*, or *is*], and hence, also, was represented by *I*. Those places, where the short sound of *i* is, sometimes, represented by *EI*, as in *sibei*, or *seibi*, *faceiu*[*ndum*], are to be regarded as mere 'lapsus pennae'. In the later Roman language this sound in some cases settled down into *e*, and in this form, also, it has passed over into the Italian language."

Mr. Corssen is perfectly right in declaring, that the question,

whether the character *EI* simply represented an intermediate sound between *e* and *i*, or whether it also indicated a diphthong in which both the sounds of *e* and *i* were heard [i. e. Engl. diphthong *ei* in *height*], can only be decided on the ground of the inscriptions, since in the manuscripts of the oldest poets, in consequence of later emendations, *ei* was either not preserved at all, or only partially so, since even the latest editors, in restoring old readings, which they found occasionally preserved, by no means acted in a uniform manner. On this account we can only occasionally call into aid the orthography of the manuscripts, in order to prove points which have been previously established by the inscriptions. Mr. Corssen, therefore, bases his arguments on the latest minute investigations of inscriptions, and, especially, upon those instituted by Mommsen and Ritschl, who have opened a new era in this department of philology; and first of all he considers those of the ante-Augustan period, in which *ei* is found in the stems; they are the following:

Deiv., *deivas*, *deivae*, *deivinam*, *eidus* for *idus*, *leibertus*, *leibravit*, *leibereis*, *leiberique*, *leiberei*, *leiberorum*, *leiberisve*, *leibereis*, *leiberos*, *leibertini*, *leibertate*, *Seispitei*, *eitur* for *itur*, *eire*, *abei*, *abeitur*, *eis*, *eit*, *abei*, *deicerent*, *deico*, *deixistis*, *deixerit*, *deixerint*, *deicere*, *deicito*, *deicet*, *deicundo*, *deicunto*, *deicei* for *dici*, *deicit*, *deixeritve*, *exdeicendum*, *exdeicatis*, *incedeiretis*, *difeidens*, *afleicta*, *deilexit*, *Teiburtes*, *Veicentinos*, *meilia*, *meilites*, *Veiturios*, *feil[ius]* for *filius*, *ceivi* for *civi*, *ceivis*, *ceives*, *ceivitate*, *screiptus*, *conscreiptisve*, *conscreiptumve*, *proscreibeiwe*, *leitisque* for *litisque*, *leisque*, *leiterasve*, *Teidia*, *Peisidae*, *preimus*, *preimum*, *Preimae*, *Preimus*, *preivataque*, *preivatae*, *veivos*, *veivont*, *veixit*, *veitae*, *veiginti*, *veicus*, *inveisa*, *feient* for *fient*, *deividunda*, *erceiscunda* for *herciscunda*, *ameiserunt*, *promeisserit*, *promeisisset*, *repromeisisset*, *eis*, *eiei*, *eidem*, *eidemque*, *quei* for *quis*, *quei* for *qui*, *heic* for *hic*.

The fact, that the sound, here expressed by the letters *ei*, whenever it was produced by the intensifying of a vowel, or

the weakening of the fuller diphthongs *ai* or *oi*, was originally a diphthong, is proved by the cognate tongues, especially the German, Greek and Oscan. Two letters, originally, always represented two different sounds, but, in the course of time, in order to represent intermediate sounds of more recent origin, recourse was had to the plan of writing two letters between which two the sound in question was found, viz. *ei*, *ae*, *oe*. The question now is, whether the character *EI* represented a diphthong or an intermediate sound, at the time, to which our written monuments date back.—The oldest forms among the above words are *deiv.*, on a stone of Pesaro, *deivas*, on a very old inscription, *eidus*, on the inscription of the 'columbarium' of Somaschi; thus, according to Mr. Corssen, the spelling *ei* occurs even at the time of the Punic war. However, in the very oldest inscriptions, a long *i* is found in the stem-syllables of the following words, viz. *militare*, *filea*, *filios*, *Scipione*, *Scipio*, *hic*, *qui*, *primos*, *scriptum*, *scribamus*, *perscriptum*, *scito*, *primo*, *primus*, *Viturius*. Thus, on the old monument of the *Furii*, was written *militare*, and, a hundred years later, on a mile-stone from the time of the Gracchi, *meilia*; on the sarcophagi of the Scipios we find *hic* and *hec*, and, on later inscriptions, *heic*; in one of the epitaphs of the Scipios *quei*, and in an inscription of the same period *que*; on the 'cista' of Praeneste, and on one of the oldest sarcophagi of the Scipios, *filea*, *filios*, and more than a century later, *feilius*.—By comparing the nominatives *hi-c*, *he-c*, *qui*, *que*, with their stems *ho-c*, *quo-*, it follows, that these nominative forms arose by the demonstrative pronoun-stem *i* being affixed to the stems (comp. *οἶος*), as in the old forms *cum-e* and *tam-e*, where *i*, as in all other cases, when it was a final, was weakened into *e*. In this manner were obtained the forms *ho-ic* (*this one there*) and *quo-i* (*which one there*), which, by obscuring the diphthong *oi*, became *hic* and *hec*, *qui* and *que*. The two forms of spelling, *quei* and *qui*, which occur at the period of the earliest inscriptions of the Scipios, thus indicate, that *e*

represented the very same sound, obscured from the diphthong *oi*, which was expressed by *ei*; and, inasmuch, as *e* represented a simple sound, and not a diphthong, we must admit the same thing with regard to *ei*. Hence, Mr. Corssen very justly concludes, that, wherever, in the stems of other words, *ei* represents a sound obtained by the intensifying of the vowel or from the diphthongs *ai* or *oi*, it always had the same sound as in *quei* and *qui*, thus an intermediate one between *e* and *i*.—At the time of Varro and Quintilian the people in the country said *leber* instead of *liber* (comp. *loebertatem*, λωβη), *vendemia* for *vindemia* (ὄλως), *vella* for *villa*, *spēca* for *spica* (I., 210, 211).

"If, in the oldest times," Mr. Corssen observes (I., 211), "the people in the provinces and in the country pronounced 'e' [in *ell*], In the place of the original diphthong *oi*, we must, hence, conclude, that at an early age, also, *e* [in *ell*] was in vogue, in the examples quoted immediately above, in the mouth of the rustic population, in the place of an original *oi*, and, indeed, as early as the time of the Punic war, when *hic* and *hec* were both pronounced and written instead of *hoic*, and *qui* and *quei* for *quoi*. The fact, that, at the time of Lucilius, the character *ei* represented nothing else but the intermediate sound between *i* and *e*, has also been proved. Now, inasmuch, as the greater number of the inscriptions, from which the above words, in which the stem-syllables are spelled with *ei*, have been collected, date from the above periods, it follows, that we are not justified, in any of these forms, to assume, that the character *ei* was pronounced as a diphthong."—The following investigation, however, places Mr. Corssen's assertion beyond any doubt.

In the derivative syllables of nouns *ei* appears only in the following nouns, viz. *mareitum* for *maritum*, *peteita* for *petita*, *fugiteivos*, *ameicorum*, *Cisalpeina*, *peregreinos*, (I., 212); but in still older inscriptions we find *aidiles*, *aidilis*, *Quiri[na]*, *parisuma*, whence it follows, that, at the time of the Punic war, the simple sound of *i* in *machine* was

heard in the suffixes,—*ili*,—*ino*,—*isuma*; consequently, that the character *ei*, in these same suffixes, at a later period, only expressed the sound of *i* in *machine*, inclining to *e* in *ell*. But, this same sound, as it appears, was not heard very distinctly in these suffixes, inasmuch as they were generally and regularly spelled with *i* (I., 212).

In order to examine the spelling of *ei*, in the termination of inflections, Mr. Corssen collects the following verbal forms;

1. Third person singular, present subjunctive, *seit* for *sit*.
2. Third person singular, perfect indicative, *redieit* for *redii*, *posseidit* for *posseidit*, and *venieit* for *veniit* (three times).
3. Second person singular, perfect indicative, *interieisti*, *gessistei*, *restitistei*.
4. First person singular, perfect indicative, *petiei*, (*petii*), *feciei* (*feci*), *poseivei* (*posivi*, *posui*), *conquaeisivei* (*conquisivi*) *redideique* (*reddidique*).
5. Third person plural, perfect indicative, *composeiverunt*, (*composiverunt*, *composuerunt*).
6. Present infinitive, active voice, *audeire*, *eire*, *veneire*.
7. Present infinitive, passive voice, *solvei*, *mittei*, *darei*, *legei*, *accipei*, *utei*, *fruei*, *profiterei*, *fierei*, *ducei*, *mittei*, *agei*, *exportarei*, *renuntiarei*, *legarei*, *tuerei*, *restipularei*, *includei*, *concipei*, *judicareique*, *praestarei*, *possidere*, *proscribei*, *reddeive*, *deicei* (I., 212. 213).

None of the inscriptions, in which these forms occur, date before the time of Lucilius (150 before Christ); but the Plautian forms *veis*, *curabeis*, *comedereis*, *redieit*, furnish us with proofs, that the spelling *Ei* was used in books at an earlier period. In the oldest inscriptions, after the Punic war, we find *I* or *E* in these verbal forms, thus *fecid*, *cepit*, *fuit*, *fecit*, *dedit*, *fuise*, (*fuisse*), *compromesise* (*compromissise*), *dedise*, *fecise*, *arfuise* (*adfuisse*), *jousisent* (*jussissent*), and in the present tense *subigit*, *abdoucit* (Sc. Barb.) but *E* in *dedet* (*dedit*), *dede* (*dedit*), *fuet* (*fuit*), *exemet* (*exemit*), *cepet*, *ornavet*, and after the time of Lucilius and

the Gracchi, *posedet* for *possedit*, *fecet* for *fecit*, *juset* (*jussit*), *dixet*. Up to the time of Augustus, we find both *I* and *E* in verbal forms, but, whenever a word ends in *t*, the spelling *I* is by far more general.

From the vacillation of the spelling of *cepit*, *fuit* and *dedet*, *fuet*, in the sarcophagi of the Scipios, Mr. Corssen concludes, that in these forms the intermediate sound between *e* and *i* was fully developed, and that in the mouth of the country people the sound *e* in *ell* prevailed as in *leber* (*liber*), *vella* (*villa*), *specca*, etc., which sound [we add, continued among them, throughout the whole duration of the Roman empire, and became again universally dominant, when, by the decline of the refinement of the cities, the language of their inhabitants sank down again to the level of the rustic population, and, therefore,] reappeared again in these verbal forms, in the latest Latin, especially in inscriptions of the fifth and sixth centuries, as in *vixet*, *vixset* (twice), *vixse*, *viset*, all for *vixit*; *obiet*, *oviet* for *obiit*, *fecet*, *fece* for *fecit*; *miliavet*, *curavet*, and also in the present forms, *scribet*, *quiescet*, *quescet*, *cesquet*, *quiesce*, *requiesquet*, *requiescet*, *requiescet*, (I., 214); however, that *ei* in *poseit*, *redieit*, *posedeit*, really described a sound which was long by nature, has been proved by Mr. Corssen in his part on quantity.

As regards *EI* in the endings of the inflections of declensions, Mr. Corssen is quite right in separating the forms of the consonant and *i*-declension from those of the *a*- and *o*-declension, inasmuch, as, in the latter only, *ei* appears in the place of an original *ai* or *oi* (I., 215). Among the former, viz: the consonant and *i*-declension, we find the following datives, viz.: *virtutei*, *Martei*, *Junonei*, *Quiritei*, *Herculei*, *Sispitei*, *Vediovei*, *patrei*, *leegei*, *Jovei* (four times), *heredeive*, *operei*, *fraudei*, *maiorei*, *actionei*, *praecone*, *redemptorei*, *urbei*, *jurei*, *captionei*, *Veneri*. Among these the forms *virtutei* and *Martei* date as far back as the period of the first Punic war. But at the same time with these forms in *ei* we also find datives ending in *i*, in inscriptions, as *Marti*, *Jovi*.

In the consonant and i-declension, however, the spelling *e* in the dative predominates most decidedly in the inscriptions, dating from that ancient period, e. g. *patre, Junone* (together with *Seispitei, Matri*), *Matre, Diove* (cfr. *Diiove*, Quint. I., 4, 17, Mommsen, Unterital. Dial. p. 255 [not 253],) *Pisaurese, [Nov]esede, Mavrte, Marte, salute, Hercle*, and from a later period, *Victore* (together with *Jovei*), *jure, Hercule, Jove, lictore, Pilemone, fruge, parenteve*.

If, now, we compare the oldest of these dative forms, viz. those on the stones of Pesaro, and on the Old-Latin earthen vessels, with the much rarer spelling of *Marti, Jovi, Martei, virtutei*, in inscriptions of the oldest times, it appears, that the intermediate sound, in these forms, as well as in all the other dative forms of the consonant and i-declension, was sounded almost like *e* in *ell*, and, in later times only, received the sound of *i* in *machine*. Even in the classical period of the Roman literature we find the two forms *jure* and *aere*. In the usual dative ending of u- and o-stems, whose genitive case is formed in *ius*, we also find the spelling *ei*, e. g. *senatuei, quoei* for *cui, quoeique, eiei, ipsei, aieve (aliive) iei* (1, 2, 215, 216). Ablatives with this ending are *virtutei, fontei, partei, omnei*. In Ennius, also, and Naevius, according to Mr. Corssen, traces of this spelling are visible; still, in these authors, they have not yet been established beyond a doubt (I., 217); however, none of these forms date before the time of Lucilius. In the very oldest inscriptions these ablatives are spelled either with *i* or *e*, as in *marid, airid, dictatored, navaled, militare, patre, aire*; and in inscriptions of a later date we find ablatives written both with *ei, e* or *i*, e. g. *Genuati, luuci, sanctioni, deditioni, hereditati, heredive, portioni, continenti; contione, mense, Flusare, parte, longitudine, latitudine*. The fact, that even in the times of Cæsar, in the 'lex Julia,' we read *continenti, partei* and *parte*, shows that *ei*, at this time, still represented the intermediate sound between *e* and *i*, as in the Punic war. Hence, also, arises the vacillation between the spelling of *E* and *I*, in

consonant and i-stems, at the time of Augustus, and even later, after *ei* had ceased to be employed for the representation of that intermediate sound.

In the case of the genitive singular of consonant and i-stems, Mr. Corasen did not meet with any instances, in the older inscriptions, where it was spelled *EIS*, but he found it spelled *ES*, in the very oldest inscriptions, as in *salutes*, *Apolones*, which he identifies with the very late forms (508 after Christ,) *Caesares*, *campestres*, *pages* for *pacis*, *mare* for *maris* (I., 218.) We have no objection to his doing so, but we are inclined to believe, that in the former *es* was long, while in the latter it was short.

The accusative plural, and more seldom, the nominative plural of consonant and i-stems ends in *EIS* in the following forms, viz., *claseis* (classes), *naveis*, *ponteis*, *omneis*, *turreis*, *Genuateis*, *fineis*, *calleis*, *Decembreis*, *praeconeis*, *civeis*, *tristeis*, *Quintileis*, *pelleis*, *Alpeis*. Still, in inscriptions of the same period, we find *I* in the following forms of i-stems, viz., *finis* for *fines*, *omnis* for *omnes*, *Sextilis*, *turris* for *turres*, *Octobris* for *Octobres* (I., 218), and *E* in consonant as well as in i-stems, in the following words, viz., *opsides*, *navales*, *clasesque*, *leciones*, for *legiones*, *lubentes*, *praecones*, *quaestores*, *viatores*, *Decembres*, *ceives*, *stipitesque*, *decuriones* (ib.). The declaration of the grammarians, and the vacillation of the spelling in the best manuscripts proves, that in the classical period of the literature the intermediate sound between *i* and *e*, both in the nominative and the accusative plural of consonant and i-stems, sometimes sounded more like *i*, and at another time more like *e* (I., 218). Varro's teacher, Aelius Stilo, who was much given to the interpretation of Old-Latin monuments, was in favor of spelling *eis*, in the accusative plural, e. g. *ferienteis*, *docenteis*, *saltanteis*, *facilioreis*, etc., and Varro says, that, at his time, there was a vacillation between the spelling of *is* and *es* in the accusative pl.; and also in the best manuscripts of Virgil. There are, also, some instances, in which *is* is found in the nominative plural of

these stems, and Varro states expressly, that, at his time, the people said *puppis*, *restis*, and also *puppēs*, *restēs*, in the nominative plural. The same applies to the oldest manuscripts of Cicero. In *vobeis*, also, *EI* represents the intermediate sound between *i* and *e*, as in *sibei*, *tibei*, *ibei*, *ubei*, *heicei*, where it was, afterwards, shortened into *ī* or *ē*, *sibī*, *ūbī* (Ital. *ove*), *hicce* (I., 219).

On passing to the forms of the *o*-stems, in which *EI* arose from the diphthong *oi*, Mr. Corssen first discusses the old form of the nominative plural, *pilumnoe* [for *piluminoe*, i. e. *poploe* furnished with the *pilum*, or *φιλαμενοι*], in which the vowel *o* of the stem was preserved, but the diphthong *oi* was weakened into *oe*, and, moreover, had lost the letter *s* of the plural. But, on the other hand, according to Mr. Corssen, we find in ante-Augustan inscriptions forms of the nominative plural, ending in *eis*, in which the diphthong *oi* has been weakened into *ei*, but where the sign of the plural, viz. *s*, has been preserved. They are found, at the same time, with the usual forms, ending in *ei*, in which the letter *s*, of the plural has been dropped, e. g. *eeis*, *iei*, *eis*, *eisdem*, *ieis*, *ei*, *ieis*, *eidem*, *Vertuleieis*, *leibereis*, *Minucieis*, *Rufeis*, *Cavaturineis*, *gnateis*, *facteis*, *heisce* (111, 108, 106, 100, 99, before Christ), *magistreis*, *Heirennieis*, *Laverneis*, (at the same time with *filiei*), *filiei*, *numei*, *quei*, *foideratei*, *oinvorsei*, *virei*, *magistrei*, *Juliei*, *invitei*, *Poppaei*, *colonei*, *publicei*, *lectei*, *datei*, *Roscieis*, *Tossieis*, III *vireis*, *Italiceis*, *juratei*, *Romanei*, *ceterei*, *lectei*, *sublectei*, *institutei*, *solitei*, *factei*, *postereique*, *amicei*, *societique*, *agrei*, *scriptei*, *ipsei*, *hei*, *publicanei*, *illei*, from the time of the Empire, *Sep-tumieis*, *createi*, *designatei*, *factei*, *legatei*, *reliquei*, *librarei*, *duovirei*, *patronei*, *unguentarii*.

In the oldest inscriptions, however, *E* is written in the plural forms, instead of *EI*, as in *modies*, *ques*, *es*, *ploirume*. At the time of the Gracchi, also, we find both *EI* and *E* in the same nominative forms, and at the same time, e. g. *Veturies*, *Mentovines*, *Cavaturines*, *duomvires*, *Atilies*,

Saranes, magistres, plurume. To these forms also belong *matrimes, patrimes*, mentioned by Verrius Flaccus, which must have dated from olden times, inasmuch as the *s* in the nominative plural is no longer found after the time of the war with the Marsi. Shortly, after the time of the Gracchi, some nominatives are also found, in inscriptions, spelled with *I*, but where the original *s* has been preserved, e. g. *Veturis, hisce, ministris, magistris* (I., 221, 222). Upon comparing these forms with *modies, ploirume*, which are found in the oldest inscriptions, it appears, that, in earlier writing, *I* or *E* was written in the nominative plural of *o*-stems, and that after the time of the 'senatus consultum de Bacchanalibus', the same sound was also represented by *EI*, thus, that the sound, which had arisen from the diphthong *oi*, in all these forms, was an intermediate sound between *e* and *i*.

The same thing we notice in the genitive singular, where the diphthong *oi*, which originated from *ois*, was reduced into a simple broad *i* in *machine*, before the spelling of *EI* was introduced. We find it spelled with *EI* in the following forms viz., *Romanei, colonei, populei, locei, publice, agrei, vinei, stipendiarei, leiberei, suei, ostiei, compagei, magistrei, pageiei, vicei, Sulpicei, fanei, faciumdei, exportandei, damnateive, furtei, mandatei, habitandei, utendei, municipiei, damnei, infectei, praeefective, Marcei, Vergilei*. Instead of *EI*, we find *I* in the oldest inscriptions, up to the time of the 'senatusconsultum de Bacchanalibus,' e. g. *Sacturni, Volcani, Keri, Kaili, Barbati, Latini*; and also in law-documents and other monuments, up to the time of Augustus, we find genitives in *i* together with such in *ei*.

The same applies to the dative and ablative plural of *o*-stems, in ante-Augustan inscriptions, where we find *EI* in the place of the diphthong *oi*, which latter has still been preserved to us in the forms *suois, gnatois*. Such datives are: *libreis, soveis (suis), eeis, ieis, coloneis, vicaneis, olleisque (illisque), ceteris, leibereis, postereisque, Pisideis, portorieis, martumeisque, capiundeis, amiceis, liberteis, sueis, boneis,*

domineis, vieis [?], *purgandeis, certeis, loceisque, publiceis, tributeis, fruendeis, conscreipteis, serveis, Caedicianeis, Papieis*, (together with *colonis, Senuisanis*), *fileis*.

Ablatives of the same kind are: *castreis, socieis, eeis, eieis, eis, eisdem, ieis, mieis, proxsumeis, inviteis, vinculeis, amiceis, sueis, viasieis, agreis, publiceis, moinicipieis, singoleis, heisce, anneis, vireis, conciliaboleis, legundeis, oppedeis, foreis, rostreis, abiegnieis, crasseis, seneis, aesculnieis, Puteoleis, primeis, pageis, noneis, ceterais, secundeis, tertieis, legundeis, sublegundeis, loceis, aedificieis, oppideis, ludeis, comulateis, olleis, illeis, perpetueis, integreis, certeis, libreis, jurateis, comitieiis, anneis, annueis, coloneis, plostreis, jumenteisve, municipieis, singuleis, conciliabuleis, castreis, conscreipteisve, legateis, judicieis, dateis, jusseis, meriteis*.

Together with the ending *eis* there also occurs in the same inscriptions, although more rarely, the form *is*, which has become generally dominant afterwards; in a few cases we, also, find *es*; e. g. *invitis, vicaneisve, Januaries, secundis, hisce, terminis, controversis, fiscis, scriptes, puplicis, proxumis, iisdem, conscriptes, isdem*. Thus Mr. Corssen concludes, that in all these cases *EI* could not have represented a diphthong.

Ei also appears in the dative and ablative plural of the *a*-declension as the representative of a sound, originating in the diphthong *ai*, e. g. in the dative, *incoleis, scribeisve, inferieis, vieis purgandeis*; in the ablative, *soveis (suis), taboleis, tableis, tabuleis, controversieis, decurieis, causeis, praefectureis*. The older form *nuges* instead of *nugais*, and the spelling *I* which occurs at the same time with *EI*, shows, that in this instance, also, *EI* had lost its character as a diphthong, and simply represented the intermediate sound between *e* and *i*.—Thus, also, the vacillation in the spelling of the following words is explained, viz :

<i>e</i>	<i>ei</i>	<i>i</i>
<i>die quarte,</i>	<i>die septimei,</i>	<i>die quinti, die noni, die crastini,</i>
<i>here,</i>	<i>herei,</i>	<i>heri,</i>
<i>peregre,</i>		<i>peregri.</i>

The forms *quarti, quinti, septimei, noni, crastini, heri, herei, peregri*, are endings of the locative case, as well as *domi, humi, vesperi*. In '*die*,' according to Mr. Corssen, the locative ending has been dropped, as the letter *i* has frequently been dropped in the endings of the *e*-declension. As regards the case in *præfiscine*, Mr. C. leaves it undecided. [Perhaps the letter *e* in *die* has been contracted from *diei*, as in *Δαρείος, Dareus, Darius, μουσείον, museum*]. A similar vacillation is observed in the spelling of the following pronouns and conjunctions, viz.

<i>e</i>	<i>ei</i>	<i>i</i>
Latin. <i>sibe,</i>	<i>sibei,</i>	<i>sibi,</i>
<i>tibe,</i>	<i>tibei,</i>	<i>tibi,</i>
Umbr. <i>tefe,</i>		
Umbr. <i>mehe,</i>	Lat. <i>mihei,</i>	<i>mihi,</i>
<i>ube</i> (a later Lat. form, " <i>ubei,</i>		<i>ubi,</i>
comp. Ital. <i>ove,</i> Umbr. <i>pufe</i>),		
Umbr. <i>ife,</i>	Lat. <i>ibei,</i>	<i>ibi,</i>
Latin. <i>ne,</i>	" <i>nei,</i>	<i>ni.</i>

(Mr. Ritschl has shown that in the oldest inscriptions the spelling *ne* prevailed, that, in the course of time, *nei* and *ni* became more and more developed, until at last *ne* came again into use)

Umbr. <i>sve,</i>	Lat. <i>sei,</i>	lastly <i>si,</i>
Volsc. <i>se,</i>		
Latin. <i>nise,</i>	<i>nisei,</i>	<i>nisi,</i>
	<i>nesei,</i>	
" <i>quase</i> ('in multorum	<i>quasei,</i>	<i>quasi,</i>
<i>libris,</i> as Quintilian says),	<i>quansei.</i>	
	<i>utei,</i>	<i>uti.</i>

The fact that Lucilius did not succeed in regulating the spelling of *EI* and *I*, appears from the following synopsis of

the different modes of spelling which are collected from the most important law-documents from the time of the Gracchi to Cæsar :

	<i>e</i>	<i>ei</i>	<i>i</i>
Tab. Bantin.		<i>nei,</i> <i>plebeive,</i>	<i>ni,</i> <i>plebive,</i>
Tab. Genuat.	<i>Veturis,</i> <i>dum-ne,</i> <i>posedet,</i>	<i>Veituros,</i> <i>nei,</i> <i>posedeit,</i> <i>ibei,</i> <i>utei,</i> <i>controversieis,</i> <i>inviteis,</i>	<i>Vituriurum,</i> <i>ni,</i> <i>ibi,</i> <i>uti,</i> <i>controversis,</i> <i>invitis,</i>
	<i>fonte,</i>	<i>fontei,</i>	
Lex repetund.	<i>parenteve,</i>	<i>majorai,</i>	<i>parti,</i>
(Serv.)	<i>teve,</i>	<i>rostriis,</i>	<i>rostriis,</i>
Lex repet.		<i>plebeive,</i> <i>lucei,</i>	<i>plebive,</i> <i>luci,</i>
Lex agrar. (Thor.)		<i>locei,</i> <i>populei,</i> <i>agrei,</i>	<i>loci,</i> <i>populi,</i> <i>agri,</i>
Lex Corn. de		<i>screiptus,</i>	<i>scripius,</i>
XX quaest.	<i>Decembres,</i>	<i>Decembreis,</i>	
	<i>praecones,</i>	<i>praeconeis,</i>	
Sc. d. Asclep.		<i>veneire,</i>	<i>venire,</i>
Claz.		<i>leibereisve,</i>	<i>leiberisve,</i>
L. d. Termes.		<i>Peisidae,</i> <i>ceives</i>	<i>Pisidae,</i> <i>civeis,</i>
		<i>populei,</i>	<i>populi,</i>
L. Jul. mund.		<i>conscreiptumve,</i> <i>deicet,</i> <i>tueri,</i> <i>advehei,</i> <i>exportarei,</i>	<i>conscripius,</i> <i>dicere,</i> <i>tueri,</i> <i>advehi,</i> <i>portari,</i>
	<i>parte,</i>	<i>partei,</i> <i>ubei,</i>	<i>continenti,</i> <i>ubi,</i>

	<i>ei</i>	<i>i</i>
	<i>seive,</i>	<i>sive.</i>
L. Rubr.	<i>eeis,</i>	<i>ieis,</i>
	<i>repromeisserit,</i>	<i>repromissio,</i>
	<i>duceique,</i>	<i>duci,</i>
	<i>possidereï,</i>	<i>possideri,</i>
	<i>deicet,</i>	<i>interdixetve,</i>
	<i>nisei.</i>	

In the Augustan age the spelling *EI* came generally into disuse; but the intermediate sound, which was represented by *EI* remained, of which Quintilian says (1, 4, 8), "*Neque e plane neque i auditur.*" After this time it was frequently marked by a tall *I*, reaching over the other letters (Ritschl, Mon. Epigr. tria, p. 31; Mommsen, Rhein. Mus. X., 124 ff). However, the spelling *EI* is still occasionally found in the best monuments of that age, up to the later times of the empire, of which Mr. Corssen mentions twenty-two instances (I., 229).

In the Umbrian dialect, also, in which the process of the obscuration of the diphthongs was carried still farther than in the Latin, the character *EI* no longer represents a diphthong, but a long sound between *e* and *i* which is also represented by *E* and *I*; compare the following forms, viz.

<i>e</i>	<i>ei</i>	<i>i</i>
<i>pehaner,</i>	<i>peihaner,</i>	<i>pihaner,</i>
<i>poe,</i>	<i>poei,</i>	<i>poi,</i>
<i>ape,</i>	<i>apei,</i>	<i>api,</i>
<i>Fise,</i>	<i>Fisei,</i>	<i>Fisi</i>

The Latin diphthongs have, thus, been obscured in the following manner:

au, into *o*, and in a few cases into *û*;

ou, through *o* into *û*;

ai, through *ae*, *e*, *ei* into *i*;

oi, through *oe* into *u*; and, also, through *oe*, *e*, *ei* into *i*.

ei, into *e*, *ei* and *i*.

The beginning of these obscurations, according to Mr.

Corssen, dates back to *antehistorical* ages. At the time in which our inscriptions begin, this process is in full operation, and the diphthongal characters are, to some extent, mere monuments of deceased diphthongs. In the Augustan age only the diphthong *au* was preserved in spelling, and this alone was transmitted to the Roman daughter-idioms; see our remarks on the pronunciation of *ai* and *oi*, page 136.

This process of extinction of the diphthongs which commenced in the Latin at the time of Roman greatness and vigor, invaded also the system of Greek vowels, after the classic time of Greece had passed away. It may be interesting, perhaps, to our readers, to learn the facts, collected by Mr. Corssen, in this respect (I., 231).

In the earliest time the diphthong *ae* was weakened into *ae*. In this weakened form it appears, even, at the time, when the Roman sound *ae* was expressed in Greek by *αι*, as in *Αιμίλιος*, *Κάνναι*, *Λαίλιος* (cfr. Melhorn, Greek Grammar, p. 22). At the later time of the Roman empire it no longer sounds distinct from *e*. This is proved by the spelling in the inscriptions, e. g. *κείτε* for *κείται*, *κῆτε* for *κείται*, *κῆντε* for *κείνται*, *κί* for *καί*, *τροπεούχος* for *τροπαιούχος*, together with *ἀντλήσασται* for *ἀντλήσατε*, *ἀναΐθηκαν* for *ἀνέθηκαν*.

The other diphthongs, also, are assailed about the same time by this depravation of the vowels; hence, on Christian epitaphs we find *ι* written, both in the place of *ει* and of *η*, e. g. *κῖται* for *κείται* (in six inscriptions), *κῖντε* for *κείνται*, *βαβιλί* for *βαβιλεῖ*, *προαστίων* for *προαστείων*, *μνημίων* for *μνημείων*, *ἡρήνε* for *εἰρήνη*, *ἐψυχι* for *ἐψύχη*? *οὔδῃς* for *οὐδεῖς*, *ἱρουμ* for *ἱερουμ*, *χριστόν* for *χρηστόν*, *μίτηρ* together with *μήτηρ*, *βοΐδη*, for *βοήθει*, *ῆ* for *ῆ*. *στρατιγοῦ* for *στρατηγοῦ*, *γνισίου* for *γνησίου*, *τῆς* for *τῆς*, *λιμίν* for *λιμῆν*; we also find *ει* and *ῆ* instead of *ι*, *η* for *ει*, and *εε* for *η*, in the following examples, *μνήσθηται* for *μνήσθητι*, *τρισελβίου* for *τρισελβίου*, *Εἰακώβ* for *Ἰακώβ*, *εἰερομαρτύρο[υ]* for *ἱερομαρτύρου*, *Τερεντιανοῦ* for *Τερεντιανου*, *εἰδίφ* for *ιδίφ*, *χάρην* for *χάριν*, *ἡρήνε* for *εἰρήνη*, *ἡρηνοποιός* for *εἰρηνοποιός*, *κῆτε*, *αἰτῆς* for *αἰτεῖς*, *ἐποίεῖσα* for *ἐποίησα*.

If we compare with these modes of spelling the Greek

proverb mentioned by Einhard (Vit. Carol. Magn. Mon. Germ. Pertz, II., 452), viz., “*τον φραγον φιλον ιχης, γιτονα ουκ ιχης*,” it follows, that at the beginning of the ninth century the obscuration of the Old-Greek *αι* into *ε*, of *οι, ει, η* into *ι*, in the mouth of the people, was an established fact, which had gradually been brought about, during the preceding centuries. If we add to this, that in the Modern Greek the diphthong *αυ*, also, appears hardened into *αφ, & φ*, it is evident that in this language (where, without counting some few remnants of the old pronunciation of the diphthongs, in the place of *οι, ει, υι, η, ι, υ* there is a single *ι*, which is slightly modified in a few cases, and in the place of *αι, ε*, the system of vowels is in a worse state of dissolution and impoverishment, than even the Latin in any of the modern Roman tongues. If we take further into consideration, that the orthography in these later inscriptions is very different from that in the older, we have an additional proof that this poor and degenerated vowel-system could not have been in use at the times of the great Hellenic bard, and that the most intelligent of all nations could not have indulged in so childish and affected a whim as to employ six simple and double characters for the representation of the sound of *i* in *machine*. The Greek language, therefore, taking it all together, in the course of time, obscured its diphthongs in a similar manner as the Latin, and, even, went a good deal farther so as to extinguish the last vestige of its diphthongal sounds.



METHODS OF PRONOUNCING LATIN.

In taking a retrospective view of the preceding pages, the reader will agree with us, that they shed new light on many hitherto dark portions of Latin etymology and pronunciation. But, leaving a summing up of the new results gained for the cause of Latin etymology for some future occasion, we intend to make those, obtained for the subject of Latin pronunciation, the issue of a practical question.

The method by which the Romans pronounced the Latin, we consider now as fairly established, and in view of this fact we feel ourselves authorized to discuss the inconsistencies and shortcomings in vogue, at the present day, in America and Great-Britain, which failures are brought to light by a comparison of these methods with the standard-pronunciation of the Romans. In Great-Britain, indeed, they have in one respect an advantage over us; for, although their system of pronunciation is found entirely at variance with that prevailing among the Romans, still, throughout the whole of England there is only one method in use among all the learned, and in Scotland another, while in America we have as many pronunciations as there are nationalities absorbed in our political organism. For, in addition to the *English* and *Scotch methods*, we have the Italian, French, Spanish and German, which, although different from each other, are usually comprised under the general head of the '*Continental method*.' Moreover, many of our scholars, disapproving of the wholesale manner in which the distinction between the long and short vowels in Latin is disregarded by the English method, have introduced modifications of this system, giving the long English sound to long vowels in Latin, and the short English to short vowels in Latin. The Scotch pronunciation, also, was modified in a similar manner; and, while by some scholars the continental sound of the vowels was adopted, they retained the English sound of the consonants.—In view

of these many conflicting systems of pronunciation, which, in our country, are not restricted to peculiar localities, as in Great-Britain, but are inculcated, daily, in every part of the Union, on the minds of the rising American generation, and which, in reality, amount to no system at all, every sincere lover of classical education will agree with us, that it is a matter greatly desirable, that we should have one common Latin pronunciation. *Gould* says in the preface of his edition of *Adam's Latin Grammar*: "It is hoped that these rules will do something towards bringing about a greater uniformity of pronunciation, an object greatly to be desired: for the vicious pronunciation, arising from an entire neglect of the subject in some schools, and from the whimsical peculiarities of others, affords no little trouble and vexation to the tutor, when all the varieties of it are brought together in collegiate recitations."

In the course of the following discussion, where we intend to examine each of these methods separately and to compare them with the standard-pronunciation of the Romans, we shall endeavor to show that the only system on which the advocates of all these methods are likely to unite, is that which was in use among the Romans themselves. We propose to open our discussion by collecting the results with regard to the Roman pronunciation of the Latin which were obtained in the preceding investigation.

THE ROMAN METHOD.

Upon reviewing the preceding pages we notice that the Romans themselves pronounced the Latin differently at different periods, and the question hence arises, at which period was the Latin pronounced by the Romans in a manner most accordant to the genius of their language. The history of the Latin language at once points us to the classical period of the literature, at the times of Cicero and Cæsar, when the Old Latin, after many struggles, had settled down in the modern form, which is presented to us in the inscrip-

tions dating from these times and from the earliest period of the Roman empire. The Latin language was pronounced, at this time, in the following manner :

1. The Sounds of the Vowels.

A long, as in the English, *father*. *A* short, the same sound, shorter.

E long, like *e* in *there* or *a* in *fate*. *E* short, as in the English *bed* or *set* and *dishes*.

I long, as in the English *machine*. *I* short, as in the English *sit*. In *maximus*, *artibus*, and in some other words, mentioned in our article on *I*, it was pronounced like the French *u*. Moreover, it had sometimes an intermediate sound between *e* in *bed* and *i* in *sit*, which, in the earlier stages of the language, was represented by *ei*.

O long, as in the English *sore*. *O* short, as in the English, *nor*. When blended from *au* it was pronounced more like *o* in *off*.

U long, as in the English, *rude*. *U* short, as in the English, *put*. In *acerrumus*, *artubus*, etc., where it was afterwards changed into *i*, it sounded like the French *u*.

2. The Sounds of the Diphthongs.

Ae, like *ai* in *aisle*.

Au, like *ow* in *fowl*; before *d*, like the English diphthong *ou* in *gout*.

Eu, somewhat like *ei* in *height*; but with this difference, that in *ei* in *height* the diphthong terminates in *i* in *machine*, whilst in *eu* it ends in the French *u*.

Oe, like *oi* in *toil*, or *oy* in *boy*.

REM. *Ai* in *ais*, *ain*, *ei* in *dein*, *oi* in *proin* are not properly diphthongs, and are to be pronounced separately.

The reason of our deciding in favor of the sound of *ai* in *aisle* for the diphthong *ae*, and *oi* in *toil* or *oy* in *boy* for the diphthong *oe*, is, because at the period of which we are treating, the first members of these diphthongs were not yet

fully absorbed by their second members. This we see instanced by the decree of the emperor Claudius ; for if, at his time, these two diphthongs had already coalesced into a single sound, he would not have ordered the re-introduction of the spelling *ai* for *ae*, and *oi* for *oe*.

3. The Sounds of the Semi-Vowels.

J in *jacio*, etc., was pronounced like *y* in *year* ; as a medial, between two vowels, it sounded more softly.

V, like English *v* ; between two vowels, almost like *w*.

4. The Sounds of the Consonants.

a. Gutturals.

C, like *k*, even before *e* and *i*.

Qu, before *a* and *o*, like *k* followed by a mute *u* (in *put*), before *ae*, *e* and *i*, like *k* followed by *v*.

G, as in the English *good* and *get*, even before *e* and *i*.

H, as in English.

b. Labials.

P and *B*, as in English.

F had a peculiar sound, akin to *h*, which is difficult for us to pronounce.

Ph, like English *f*.

c. Dentals.

T, as an initial and a medial, sounded as in English ; as a final it was pronounced more softly.

Ti, when followed by a vowel, was not sibilated, but pronounced as in *tiara*, *Miltiades*.

D, as an initial and a medial, sounded like the English *d* ; as a final, it was pronounced more like *t*.

d. Liquids.

L, like the English *l*, with a few modifications.

R. The Roman *r* was lingual in its nature, while the English is more guttural.

N, as an initial and a medial, had the strong English sound ; as a final, also before *j*, *v* and *f*, and after *m* it sounded more indistinctly. Before *g* it was pronounced as in *thing*.

M, as an initial and a medial, was sounded strongly, as a final, more indistinctly.

e. Sibilants.

S had the usual sound of the English letter ; between two vowels it was pronounced more softly.

Z sounded like the Italian *z*, viz. *ts* or *ds*.

X, like the English letter.

THE ENGLISH METHOD.

"The English pronunciation of the Latin," as *Walker, the lexicographer*, observes in his 'Key to the Pronunciation of Greek and Latin Proper Names,' "has naturally sprung up in our own soil, and is congenial to our native language." It considers the analogy of the English language as the rule for pronouncing the Latin, and in so doing it does not hesitate, either to do violence to the sound and quantity of the Latin vowels or to alter the pronunciation of some of its consonants. In extenuation of this mode of proceeding, Walker holds, that the English pronunciation of the Latin sounds better to the ear than the foreign [or continental, which in the vowels, at least, does not deviate from the ancient Latin pronunciation]. He, also, says [and this we deem the only plausible excuse for the English pronunciation] : "When we consider the uncertainty we are in respecting the ancient pronunciation of the Romans, and how much the learned themselves are divided among themselves about it, the English may well be allowed to follow their own pronunciation of Latin, as well as other nations, even though it should be confessed that it seems to depart more from what we can gather of the ancient pronunciation than either the Italian, French or German." The same excuse is offered by

Gould, where he says : " For these seeming inconsistencies we can only answer by saying, we know not how the Romans sounded these vowels under like circumstances ; and as we probably never shall know, it seems most rational to give vowels in Latin the same sound we should give them in our own language when similarly situated."

The system of *Walker* has been adopted by all the subsequent advocates of the English method, viz. *Gould*, *Andrews* and *Stoddard*, etc. *Harkness* in his, "*Arnold's First Latin Book*," presents it in the following form.

I. The Sounds of the Vowels

"In the English method, the vowels generally have the long or short English sounds : the length of the sound, however, is not dependent upon the quantity of the vowel, but must be determined by its situation or accent.

(a) In all *monosyllables*, vowels have

1. The *long* sound if at the end of the word, as, *si*, *re*.
2. The *short* sound if followed by a consonant ; as, *sit*, *rem* ; except *post*, *monosyllables* in *es*, and *plural cases* in *os* ; as, *hos*.

(b) In an *accented penult*, vowels have

1. The *long* sound before a vowel, diphthong, single consonant, or a mute followed by *l*, *r*, or *h* ; as *deus*, *pater*, *patres* ; except *tibi* and *sibi*.
2. The *short* sound before a double consonant, or any two single consonants except a mute followed by *l*, *r*, or *h* ; as *bellum*, *rex*.

(c) In any *accented syllable* except the penult, vowels have

1. The *long* sound before a vowel or diphthong, as *e* in *eadem*.
2. The *short* sound before a consonant ; as *o* in *dominus* ; except,
 - a. *U* before a single consonant, or a mute followed by *r* or *h* (and perhaps *l*) ; as *Punicus*, *salubritas*.

b. *A, e* and *o*, before a single consonant (or a mute before *l, r*, or *h*), followed by *e* or *i* before another vowel; as, *doceo*, *acria*.

(d) In all *unaccented syllables*, vowels have the *short* sound; as, *cantamus*, *vigilat*: except,

1. Final *a* in words of more than one syllable. This has the sound of *ah*, as in the word *America*; e. g. *musa* (*musah*).

2. Final syllables in *i* (except *tibi* and *sibi*), *es*, and *os*, in *plural cases*; as, *homini*, *dies*, *illos*.

3. The first syllable of words accented on the second, when the first either begins with an *i* followed by a single consonant, or contains *i* before a vowel; as, *diebus*, *iratus*.

Rem. *E, o*, and *u*, unaccented before a vowel, diphthong, a single consonant, or a mute followed by *l, r*, or *h*, are not quite as short in sound as the other vowels in the same situations.

II. The Sounds of the Diphthong.

Ae and *oe*, like *e* in the same situation; e. g. *Caesar*, *Daedalus*.

Au, as in the English, *author*; e. g., *aurum*.

Eu, " " *neuter*; e. g., *neuter*.

Ei, " " *height*; e. g., *dein*.

Oi, " " *coin*; e. g., *proin*.

Rem. 1. The vowels in *ei* and *oi* are generally pronounced separately.

Rem. 2. A few other combinations seem sometimes to be used as diphthongs. *U* is always the first element of these combinations, and has then the sound of *w*; as, *suade* = *swade*: except

Ui in *huic* and *cui*, which has the sound of the long *i*.

III. The Sounds of the Consonants.

The consonants are pronounced nearly as in English, *c* and

g, are soft before *e*, *i*, and *y*, and the diphthongs *ae* and *oe*, and hard in other situations: *ch* is always hard like *k* as *charta* (*kartah*)."

In characterizing this method the author of 'Essay upon the Harmony of Language,' quoted by Walker, says, "The falsification of the harmony by English scholars in their pronunciation of Latin, with regard to essential points, arises from two causes only: first, from a total inattention to the length of vowel sounds, making them long or short merely as chance directs; and secondly, from sounding double consonants as only one letter. The remedy of this last fault is obvious. With regard to the first, we have already observed, that each of our vowels hath its general long sound and its general short sound totally different. Thus the short sound of *e* lengthened is expressed by the letter *a*, and the short sound of *i* lengthened is expressed by the letter *e*; and, with all these anomalies usual in the application of vowel characters to the vowel sounds of our own language, we proceed to the application of vowel sounds to the vowel characters of the Latin. Thus, in the first syllable of *sidus* and *nomen*, which ought to be long, and of *miser* and *onus*, which ought to be short, we equally use the common long sound of the vowels; but in the oblique cases, *sideris*, *nominis*, *miseri*, *oneris*, etc., we use quite another sound, and that a short one——."

"It is a matter of curiosity to observe with what regularity we use these solecisms in the pronunciation of Latin. When the penultimate is accented, its vowel, if followed but by a single consonant, is always long. When the antepenultimate is accented, its vowel is, without any regard to the requisite quantity, pronounced short, as in *mirabile*, *frig'idus*; except the vowel of the penultimate be followed by a vowel, and then the antepenultimate is, with as little regard to true quantity, pronounced long, as in *maneo*, *redeat*, *odium*, *imperium*. Quantity is, however, vitiated to make *i* short, even in this case, as in *oblivio*, *vinea*, *virium*. The only difference we make in pronunciation between *vinea* and *venia* is, that to the

vowel of the first syllable of the former, which ought to be long, we give a short sound ; to that of the latter, which ought to be short, we give the same sound but lengthened. *U* accented is always, before a single consonant, pronounced long, as in *humerus*, *fugiens*. Before two consonants no vowel sound is ever made long, except that of the diphthong *au* ; so that whenever a doubled consonant occurs, the preceding syllable is short. Unaccented vowels we treat with no more ceremony in Latin than in our own language."

With respect to the accent and quantity of the Latin language, as pronounced according to the English method, *George Walker*, in his translation of "*Scheller's Latin Grammar*," makes the following remarks : "The English in pronouncing Latin, generally follow the usage of their own language : i. e. they pronounce as a word similarly spelt would be pronounced in English. *a*) In dissyllables the accent is always laid upon the penultime. *b*) In polysyllables the penultime is accented if the syllable be long, but in all other cases the accent is laid upon the antepenultime. There can be no doubt, that this custom produces a pronunciation entirely different from the Latin. With them, the accent and quantity were regulated on distinct principles, and the accent might fall on a short vowel without affecting its quantity : with us, accent and quantity are in many instances confounded. With them, the sound of the long and short vowels, though elementarily the same, were always distinguished in length, with us, there is either no distinction, or it is made by substituting quite a different elementary sound. Thus according to the English pronunciation, there is no difference between *mōrari* to delay, and *mōrari* to be foolish ; but that the Latins made a difference, is clear from *Suet. Ner. 33* ; where he relates that *Nero*, speaking of his predecessor *Claudius*, satirically said '*morari eum inter homines desūsse, producta prima syllaba.*' These words, therefore, must have been distinguished in common discourse, or the sarcasm would have been unobserved."

By these quotations it is rendered evident, that the English method not only gives different sounds to Latin vowels, but also practically destroys their quantity. *Harkness*, indeed, says that the length of the sound is not dependent upon the quantity of the vowel, and *Gould*, that the quantity of the vowels is not supposed to be expressed by the *long* or the *short* sounds we give to them in English. But, by what else, we should like to know, is quantity expressed unless by the long and short sounds of the vowels; and, how can we expect our students to understand that those vowels which they are taught to pronounce with their long English sounds, are frequently short, and on the other hand, that those which they are taught to pronounce short are often long? They can commit the rules concerning Latin quantity to memory, it is true, and even apply them in scanning their Latin poets; but the subject will forever remain dark in their eyes, and they will never be able to see how the vowel *i* can be long both in *miles* and *militis*, where in one case it is pronounced according to the English method, with the long English sound, and in the other with the short one.

It may be objected that the vowel-sounds which are called long in English, are not absolutely long, nor the short sounds short, and that, consequently, by giving to short Latin vowels the so-called long English sound we do not positively make them long in quantity. This sounds plausible; for to our ears, also, the short English sound of *a* in *sand*, *aft*, *lag*, *glass* and of *o* in *off*, *bond*, *soft*, sounds as much prolonged as *a* in *fate*, and *o* in *bone*; and, on the other hand, the long sounds of *a*, *e*, *o*, *u* are found in unaccented as well as in accented syllables, and thus appear both long and short in quantity. Moreover, in English poetry short as well as long vowels are treated as long, when they receive the accent. However, all this does not alter the fact that the sound of *a* in *mane* sounds longer than the corresponding sound of *e* in *men*, and only proves that the long sounds of *a*, *e*, *i*, *u*, *o*, are *relatively* long, but have the power of becoming *absolutely*

so, when they receive the accent. The Latin long vowels, on the other hand, are *absolutely* long, even when they are not accented. This fundamental difference between the Latin and English long vowels we regard as an additional argument against supplanting the former by the latter in Latin pronunciation.

There are others, again, among the superficial classical scholars, who insist that it does not matter at all, whether we preserve the Latin quantity or not. These will always be opposed by the thorough-going classical scholars, to whom a giving up of Latin quantity would render insipid the language of the Latin poets; and inasmuch as in the estimation of many of our scholars the English method practically does destroy Latin quantity, they will forever oppose its general adoption in this country.

THE SCOTCH METHOD.

The Scotch method was introduced in this country by the Scotch masters, who from times even earlier than the revolution, down to a period within living memory, accomplished with great success the work of classical instruction.* At the present day we hear but little of it; for inasmuch as in most particulars it agrees with the 'Continental method,' it now frequently passes under this name. As it served, however, in a great measure to break up the strict English pronunciation in this country, it is a matter of curiosity to know what are its true principles, and we, therefore, propose to extract some parts of Ross' Latin Grammar, 1823, treating on this subject.

"The Latin *a* is pronounced short like *a* in *man*, or long like *ā* in *star*.

* As one example out of many, it will be remembered that Rev. Dr. Witherspoon, the President of Princeton College, was a graduate of a Scotch university, and took a prominent part in our early revolutionary Congress.

The Latin *e* is pronounced short like *ě* in *men*, or like *e* in *there*.

The Latin *i* short like *ĩ* in *legĩs*, or long like *ī* in *audis*, *audimus*.

An Anglicised pronunciation of Latin is to be cautiously avoided: as, *grēdus* for *grādus*; *netio* for *nātio*."

Brooks, in his new edition of *Ross' Grammar*, 1844, retains the sounds of *a* and *e* as laid down by *Ross*, but states the rule about the pronunciation of *i* in the following words:

"*I* has the English sound, and is short, as in *legĩs*, or long as in *audimus*. At the end of unaccented syllables, it has the sound of short *e*; as in *Fābius*, *mĩhi*, *tibi*, *sibi*."

He also makes the following additions:

"*O* has the sound of *o* in *no*, and is short as in *tempōris*, or long, as in *leōne*.

U has the sound of *u* in *tube*, and is short, as in *denūo*, or long, as in *cornū*.

Y has the English sound. In the end of an unaccented syllable, it sounds like *e*.

Es, in the end of words, sounds like the English word *bays*; as, *fāmes*, *dōces*.

Os, in the accusative plural, sounds like *dose*; as *illos*, *pueros*."

The diphthongs *Brooks* pronounces in the same way as they are done according to the English method; and also the consonants both *Ross* and himself pronounce in this way.

Upon comparing the method of *Ross* with that laid down by the advocates of that of the English, it appears that he differs decidedly from them in the pronunciation of *a* and *e* which he pronounces almost as in the Roman and Continental method. With regard to the sound of *i* he does not specify whether he intends to give to it the long English or Continental sound, but *Brooks*, his commentator, gives both to *i* or *y*, and *u* the decided English sounds, so that there is a probability that they were sounded so by *Ross* himself.

The Scotch method seems to have been embraced by many scholars who were not willing to give up the Latin quantity in the pronunciation, and by approximating it somewhat to the English method, they gradually produced, what may be called:

THE MODIFIED ENGLISH METHOD.

This method prevails in the greater part of the colleges, outside of New-England. It differs from the old English method principally in this, that it gives to the long Latin sound of *a* the sound of *a* in *father*, and in applying the long sounds of the other vowels it is not governed by English analogy, but by Latin quantity; thus they do not pronounce *militis* but *militis*, not *etiam* but *etiam*, etc.

This certainly is a move in the right direction and deserving of all praise; but we advise our friends in this line, not to remain half-way, but finish their good work, and not only to restore Latin quantity to its right in pronunciation, but also to give to the vowels their genuine Latin sound. For, unless they break with English analogy altogether, and do not allow it the least influence in Latin pronunciation, they will never secure a true and consistent pronunciation among their students; inasmuch as the weak ones among them, forgetful of Latin quantity, will ever again relapse into their old English habits, and give the long English sounds to short Latin vowels, and *vice versa*. This danger of being carried away by English analogy is not an imaginary one, but it exists both in the case of the students, and of the teachers themselves, many of whom have sadly neglected the subject of Latin quantity in their studies. Thus, while they sometimes pronounce the Latin vowels with the English sounds, according to the laws of Latin quantity, they just as often pronounce it contrary to these laws, according to English analogy; and this disorder is even worse than that of the old English method, for there, at least, they have some kind of an order, although it is not a true, but an artificial

one.—No, we must repeat it again, it is better to be cold or warm, better to have the Old artificial English method, or still better the true Roman one, than to be thus suspended between the two.

However, if even (as is done by a few) the advocates of the Modified English Method pronounce the four vowels *e*, *i*, *o* and *u*, according to English analogy, without minding the Latin quantity, and make an exception in favor of the vowel *a* (in the pronunciation of which they are never at a loss), it is still one point gained out of five.

THE CONTINENTAL METHOD.

This method has been introduced in this country by the Roman Catholics, the German Lutherans, and Reformed, and the Moravians, and is taught in their colleges and schools. As we have mentioned above, under this term are included the Italian, French, Spanish and German pronunciations. All these agree in the pronunciation of the Latin vowels (with the exception of *u*, which, as we are told by a graduate of one of the French universities, is pronounced by the French like their own vowel *u*), but they differ in the pronunciation of the diphthongs, and in that of some of the consonants, viz: *t* in *ti*, *c* in *ce* and *ci*, *g* in *ge* and *gi*, *j* and *z*, which are pronounced by each in the fashion of their own tongue. Within the last twenty years this method has gained many adherents in this country, and while some of the modern authors of Latin Grammars and text books, e. g. *McClintock* and *Crooks*, have declared themselves openly in its favor, others, e. g. *Harkness*, *Adler*, etc., have deemed it of sufficient importance to give it alongside with the English method in their books of instruction.

McClintock says, concerning this subject, in his '*First Book in Latin*, p. 3: "Almost every modern nation has its own way of pronouncing Latin. But as the vowels have nearly the same sounds in all the different countries of *Conti-*

mental Europe, there is something approaching to uniformity in their pronunciation; the English, however, give peculiar sounds to some of the vowels, and they pronounce Latin, therefore, unlike all the rest of the world. In this country two methods prevail, which, for convenience' sake, may be called the *Continental* and the *English*. We give them both, stating, at the same time, our decided preference for the first, both on the score of consistency and convenience. In both methods the *consonants* are pronounced nearly as in English."

We regard the Continental method as laid down in Harkness' Grammar as more correct, viz :

1. The Sounds of the Vowels.

"The Continental sounds of the vowels are as follows:

<i>a</i>	like	<i>ā</i> in <i>father</i> ;	e. g. <i>āris</i> .
<i>e</i>	"	{ 1. <i>ā</i> in <i>made</i> ;	e. g. <i>ēdit</i> .
		{ 2. <i>ĕ</i> in <i>met</i> ;	e. g. <i>āmēt</i> .
<i>i</i>	"	<i>ē</i> in <i>me</i> ;	e. g. <i>īrē</i> .
<i>o</i>	"	{ 1. <i>ō</i> in <i>no</i> ;	e. g. <i>ōrā</i> .
		{ 2. <i>ō</i> in <i>nor</i> ;	e. g. <i>āmōr</i> .
<i>u</i>	"	<i>ō</i> in <i>do</i> ;	e. g. <i>ūnā</i> .
<i>y</i>	"	<i>ē</i> in <i>me</i> ;	e. g. <i>nŷmpha</i> .

These sounds are uniformly the same in all situations, except as modified by *quantity* and *accent*.

2. The Sounds of Diphthongs.

ae and *oe* like *ā* in *made* ; e. g. *aetās*, *coelum*.

au " *ou* in *out* : e. g. *aurum*.

REM. The vowels in *ei* and *eu* are generally pronounced separately."

[McClintock gives to the diphthongs the following sounds :

ae or *oe*, as *e* in *there*.

au, as *ou* in *our*.

eu, as *eu* in *feud*.

ei (rarely occurring) as *i* in *nice*].

3. The Sounds of the Consonants.

"The pronunciation of the consonants is nearly the same as in English, though it varies somewhat in different countries."

Upon comparing the sounds of the vowels in the Continental method with those which we have proved to have been in use among the Romans themselves, we find that they agree in every respect. We, therefore, recommend most earnestly the adoption of this pronunciation of the Latin vowels to every sincere friend of classical education, as the only means by which order may be brought into the confusion which now universally prevails on this subject. And, we no longer recommend the adoption of this pronunciation of the vowels on the score, that they are pronounced so by the rest of the world, but because we regard it as definitely settled, that such was the utterance among the Romans themselves. Moreover, as the Roman pronunciation of the Latin is now a fixed fact, there is no longer any earthly reason why we should continue to apply to the pronunciation of the Latin the analogy of our own tongue. Let us drop the English mask, as the true features of the Latin are no longer a myth, but a fixed reality.

Before extending our comparison between the Roman and Continental methods to the diphthongs and consonants, we wish to make a few remarks in general as to the re-introduction of the former.

Although we insist on the adoption of the Roman sounds of the long and short Latin vowels, because they all exist in the English language and are familiar to the English organ, we still deem it inexpedient to imitate such sounds of the Latin as do not exist in the English language, viz., the Latin sound of the diphthong *eu*, and of the consonants *f* and *r*. Moreover, we consider it unnecessary to regard the intermediate vowel-sounds between *e* and *i*, and *i* and *u*, and the various shades of the Latin liquids and other consonants. In all of these cases we propose to express them by the nearest

English sounds; thus, the diphthong *eu* by the distinct vowels *e* and *u*—*ey* in *they* and *u* in *put*, as in the Italian, the intermediate sound between *e* and *i* either by *e* in *bed* or *i* in *sit*, accordingly, as it is spelled in Latin, and so also the intermediate sound between *i* and *u*, either by *i* or *u*; the Latin consonant *f* by the English *f*; the Latin lingual *r*, by the English guttural (or semi-guttural); and the different shades of *n*, *m*, *l*, *t*, *d*, and *s*, by the one sound we give to each of these letters in English.

A comparison between the sounds of the diphthongs in the Roman and Continental methods shows no longer the same agreement, as in the vowels.—We have made clear in our articles on the diphthongs, that the Latin diphthongs (with the exception of *au*, in some words), in the course of time, merged in single sounds (although this process was not consummated at the time from which our Roman method dates); thus, in the later Latin tongue, with the exception of *au*, all Latin diphthongs were abolished. This disaffection for diphthongs from the Latin passed over into its daughter-languages, and thus in French, Italian and Spanish we find *e* in the place of the Latin diphthongs *ae* and *oe*, and almost altogether *o* in the place of *au*.

Wherever the French language produced any diphthongs of its own, it carried out its original tendency of breaking up diphthongs, which tendency it had received from the Latin, and it either reduced them into single sounds, as in *ai*, *au*, *ei*, *eu*, or else it separated them into two distinct sounds, viz., *oi*. This process of separating diphthongs into two distinct sounds is fully carried out in the Spanish, and in the Italian. But in all the Germanic tongues the diphthongs are preserved in their unalloyed form. Hence, these nations also differ in the pronunciation of the Latin diphthongs, and all of them, including the Germans, have departed from the classic pronunciation. For practical use we recommend the following Roman sounds of the Latin diphthongs:

ae, like *ai* in *aisle*.

au, like *ow* in *fowl*, and before *d* like the English diphthong *ou* in *gout*.

eu, in two syllables, viz., *ey* in *they* and *u* in *put* as in the Italian.

oe, like *oi* in *toil*, or *oy* in *boy*.

As regards the sound of *ti* before a vowel, every one of the continental nations pronounces it differently.

We have shown above, that the Romans during the classic time of their language pronounced it like *ti* in *tiara*; that by the influence of the succeeding *i* it became assibilated, in the course of time, and, during the process of its assibilation, passed through four distinct stages. In the *first* stage of assibilation it was changed into *ts*, and into the kindred sound of *th*; in the latter form it is preserved in the Spanish, and in the former in the German and Italian. In the *second* stage it sounded like *tsh* or *dsh* as sometimes in Italian; in the *third* like *s* as in French, and in the *fourth* like *sh* as in English, e. g. *nation*. Every one of these nations has thus a predilection for one of these sibilants, and the question hence arises, whether we ought to insist on returning to the classical Roman sound of *ti* in *tiara*, or give way to the bias of each nation. If we admit the sibilation in case of *t*, in order to be consistent, we must also do it in the case of *g*, *c*, and *j*. In the case of *j*, we are emphatically opposed to its sibilation; for, by the combined efforts of *Aufrecht* and *Corssen* its place among the simple consonants or rather semi-vowels has been vindicated, and its power of making a vowel long by position has been disproved, and, on this account, we think it ought to be most carefully separated from the English *j*, which really is a double consonant, and might be imagined to make a preceding vowel long by position. For the same reason we are opposed to extending the English soft pronunciation of *g* to Latin *ge* and *gi*, but recommend its being always pronounced like the hard Roman *g*, as is done almost universally throughout the country in Greek. In the case of *t* and *c*, which became assibilated in the Latin itself, (while the assibilation of *j* and

g is of post-Latin origin), we propose that from the fourth and third stages of assibilation where they occur in English, they be transferred back again at least into its first stage, i. e. that *ti* and *ci* be pronounced *tsi*, instead of *shi* and *si*. As regards the pronunciation of *z* we ought to insist on its Roman pronunciation, viz. *ts*, (*ds*) for it is a compound consonant in Latin and ought to be pronounced as such.

We, therefore, recommend the adoption of the Roman method in the following form, which we may call

THE PRACTICAL ROMAN METHOD.

1. The Sounds of the Vowels.

A long, as in the English, *father*. *A* short, the same sound, shorter.

E long, as in the English, *fate*. *E* short, as in the English, *then* and *dishes*.

I long, as in the English, *machine* and *caprice*. *I* short, as in the English, *sit*.

O long, as in the English, *hole*. *O* short, as in the English, *nor*.

U long, as in the English, *rude*. *U* short, as in the English, *put*.

2. The Sounds of the Diphthongs.

Æ, like *ai* in *aisle*.

Au, like *ow* in *fowl*; before *d*, like the English diphthong *ou* in *gout*.

Eu, in two syllables, like the same Italian diphthong.

Oe, like *oi* in *toil*, or *oy* in *boy*.

REM. *Ai* in *ain*, *ais*, *ei* in *dein*, *oi*, in *proin* are not properly diphthongs, and are to be pronounced separately.

3. The Sounds of the Semi-vowels.

J in *jacio*, like *y* in *year*.

V, like English *v*.

4. The Sounds of the Consonants.

a. Gutturals.

C like *k*, before *e* and *i* (*y*) like *ts*, as in *glacies*, *facio*, *facis*, etc.

Qu, before *a* and *o*, like *k*, followed by a mute *u* (in *put*); before *ae*, *e* and *i*, like *k* followed by *v*.

G, as in the English *good* and *get*, even before *e* and *i*.

H, as in English.

b. Labials.

P, *B*, *F*, and *Ph* as in English.

c. Dentals.

T, as in English. *Ti*, when followed by another vowel, as in *natio*, like *ts*, except when preceded by *s*, *x*, or another *t*, as in *tristior*, *mixtio*, *Bruttii*, in old infinitives in *er*, as *nitier*, *quater*, in Greek words such as *Miltiades*, *Boeotia*, *Aegyptius*, and at the beginning, as in *tiara*, in all of which cases it is pronounced like *t*.

D, as in English.

d. Liquids.

L, *R*, *M*, *N*, and *NG*, as in English.

e. Sibilants.

S and *X*, as in English.

Z, like the Italian *z* viz: *ts* or *ds*.

In conclusion we would propound to all lovers of classical education the following interrogatories.

1. Is it right for us to teach our students what has been proved to be wrong?

2. Is it easier for a student to learn to pronounce the Latin in the Roman or in the English fashion? that is, is it easier to pronounce *a* always like *a* in *father*, or *ah* in *Jehovah*, *e* long,

like *ey* in *they*, or short, as in *bed* or *set*, *o* long as in *sore*, or short as in *nor*, *i* either long as in *fatigue*, or short as in *sit*, the long *u*, like *u* in *rude*, and the short like the same letter in *put*, or else to guess among the many sounds of the English vowels?

3. Can we expect the majority of our students to have the least idea, why the vowel *e* in *nemus*, and *i* in *miles*, are pronounced long and receive an entirely different sound from the other cases, where they must be pronounced short, though they have the accent on the same syllable as in the nominative case?

4. Will they not regard the vowel *e* in *nemus* long, if they are taught to pronounce it as in *me*? And will they not consider *i* in *militis* short, if they pronounce it like *i* in *sit*, while in *miles* they pronounce it as in *child*?

5. Will they not get a wrong idea of the Latin metres, if they are taught to violate Latin quantity in their pronunciation?

6. Will not our students if they are suffered to apply the analogy of their own tongue to the Latin language, apply it also to the Latin words which they find in the French, Italian, Spanish and Portuguese languages? Will they not consider themselves authorized to introduce it even into the Semitic and Germanic tongues, since the Hebrew proper names have already been anglicized, and they meet with many Anglo-saxon stems in the German language?

7. Is there really any possibility at all of applying the analogy of the English language consistently to the Latin, since we cannot expect our students to be acquainted in all cases with the Latin quantity, which is frequently ignored by their teachers themselves, and since in order to follow out this analogy they are sometimes obliged to shift even the Latin accent, e. g. *ov* in English is pronounced *oov* in *move*, *prove*; and in order to carry out this pronunciation in Latin, as in *removet*, the students are absolutely obliged to shift the accent from the antepenultimate to the penultimate?

We commend these interrogatories to the earnest attention of all lovers of classical learning amongst us. As our political and religious institutions are deriving shape and form from the character of our country, so our practices in Latin pronunciation are rapidly assuming a fixed character. The question is, shall these practices be uniform, or shall they differ so much, as virtually to make the Latin tongue, in this country, in the hands of Englishmen, Scotchmen, Frenchmen, Germans, Italians, etc., essentially a different tongue, understood by none of the other nationalities? The only hope for uniformity consists in adopting those well-defined sounds which, it is as certain formed the usage of the classic age, as the practices of the educated classes in Paris or Florence give the tone to French or Italian pronunciation everywhere.

We cannot conclude without earnestly asking the attention of the learned to this treatise of Mr. Corssen, which, however we may differ from it in details, has done more to place this subject on a determinate basis, than any preceding effort.

APPENDIX.

EXCURSUS

ON ZETACISM AND THE PRONUNCIATION OF THE GREEK AND LATIN Z.

After Mr. Corssen has shown, that, whenever in the Latin a second vowel follows, after the combinations of the guttural smooth and the dental smooth and middle with the vowels *i* or *e*, these consonants are changed into the sound of *z* (= *ds* or *ts*), he deems it superfluous to enter any farther into the old disputed question among the learned, whether the letter *z* arose from *ds* and *ts* or from *sd* and *st*; for after the explanation which he has given, he regards it as settled that the consonants *d* and *t* preceded the *s*. However, as there are some scholars in this country as in Europe who still hold and defend the opposite doctrine, we deem it advisable to fortify and strengthen our position still more, by proving that this phenomenon is not at all confined to the Greek and Latin, but also appears in other languages. *Prof. A. Schleicher*, the learned co-editor of a *Journal of Comparative Philology** and author of a *Lithuanian and an Old-Slavonic Grammar*, shows in his work entitled 'Investigations in Comparative Philology, 1848.'** that in almost all languages, in the later stages of their development, the gutturals and dentals, and even the labials to some extent, when followed by the consonantal *y*, before *i* and *e*, were weakened and changed into sibilants, which process he calls 'Zetacism.'

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** *Sprachvergleichende Untersuchungen*, No. 1. *Zur Vergleichenden Sprachengeschichte*, von Dr. A. Schleicher.

Although it is very difficult to trace the changes of sound in a language, lacking the convenience of alphabetic writing, which is the chief source of information for the science, dealing in the history of sounds, still, according to *Abel Remusat* and *Endlicher*, the *Chinese* language furnishes instances in the popular dialect of Peking, where *k* before *i* is softened into *k'* or *c'* (*tsh*); for the sibilants *tc'* (*tsh*), *tç'* (*tsh-h*), *sh* and *ç'* (*dsh-h*) are only found before the radical forms *a*, *ang*, *an*, *ɛ*, *en*, *ao*, *ai*, *eu*, when they are intensified or strengthened into *ia*, *iang*, *ian*, *iɛ*, *ien*, *iao*, *iai*, *ieu*, pp. 117-119.

Many "zetacistic" phenomena are noticed in the *Thibetian*, the second among the monosyllabic tongues. They occur, whenever a consonantal *y* comes into contact with a preceding consonant, which in this language is always either a guttural or a labial. Thus *ky* is changed into *tj=tsh*, *py* (*p* with consonantal *y*) into *tsh*, and sometimes it is even reduced into *sh* (*s*). *Phy* becomes *tsh-h*, thus *phyugpo*, *rich* is pronounced *tshhoogpo*; *by* (*b* with consonantal *y*) is changed into *dzh*, i. e., the English *j*, thus *byedpa*, *to do* or *to make* is pronounced *dzhedpa* or *jedpa*, pp. 115-117.

Among the *Tatarian* languages, in the *Mantshu*, *k* before *i* is pronounced like *ts*, and *g* like *ds*; and *tsh* (*k'=c*) before *i* like *ts* and *dsh=g'* like *ds*; in the *Mongolian*, *ts* is pronounced like *tsh* before *i*, and sometimes before *ü* and *u*, and *ds* like *dsh*; the sharp *ss* before *i* is usually pronounced *sh* (*s*), pp. 111, 112. In the *Magyaric* language we find the usual sounds which are produced by the zetacism, viz: *cs* (*c'*), *cz* (*ts*), *s* (*s=sh*) *zs=z'*, *zh*, etc.; *gy* is usually pronounced *dy*. But when the final *t* of verbal stems is preceded by a short vowel, this final *t* is blended with the (*j* or) *y* of the termination into *sh*, e. g. *Köt*, *Kössek*, (pronounce *Köshek*) etc.; however, when it is preceded by another consonant (with the exception of a sibilant) or a long vowel, *tj* or *ty* is contracted into *ts*=Engl. *tsh*, e. g. *tart*, *he holds*, second person of the imperative or subjunctive mood with the suffix *j* (Engl. *y*) *tarts* for *tartj* (pronounce *tartsh*), etc. Those verbal stems

in which the final *t* is preceded by *s* (*s'*), or *sz*, contract the latter, when followed by *j* (the consonantal *y*), into *ss* and *szsz*, as *fest*, to *paint*, imperative mood *fess*, *faraszt*, to *harass*, imperative mood *faraszsz*; this seems to be done by assimilating the sound, which is obtained by the coalescing of *tj*, to the preceding sibilant, pp. 112, 113.

Even the *Finnish idiom*, exceedingly soft as it is, which of the sibilants only possesses *s*, and of the double sounds, composed with them, only *tz* (Germ. *z*), (which latter, in some dialects passes over into *ss* or *ht* or *tt*), undergoes *zetacistic* changes in the sounds, preceding *i*. Mr. *Kellgren* says, p. 58, in his "Outlines of the Finnish language," that the dental *t*, when followed by *i*, turns regularly into *s*, unless it is preceded by *h*. In the *Esthonian* forms *küssi*, *wessi*, the dental *t*, even, reappears again in the oblique cases, p. 114.

As a general thing the *Semitic* languages have preserved themselves intact of the zetacism; still in the *Modern Arabian* dialect of the Eastern Bedouins, according to the "*Grammaire Arabe vulgaire*" of *Caussin de Perceval*, *Caph* (*kh*) is pronounced before *e* and *i* like the Italian *c*=*ts*, pp. 108. 109.

Among the Indo-European languages the *Zend*, *Old-Persian*, *Celtic*, *Gothic*, and *Old-High-German* remained unaffected by the zetacism. In the *Sanscrit* we can distinguish a few of its traces; thus, *g'yoot* (pronounced *djoot* or *dshoot*), *splendor*, *light*, as well as the more frequent form *dyoot*, seem to be mere expanded forms of *dyoo*, which has the same signification. This change, however, appears very frequently in its modern forms, viz: the *Pali* and the *Pracrit*, e. g. *Pali sac'c'am* (pronounce *satsham*) *truth*, from the *Sanscrit satyam*; *Pali vigga*, *science*, from the *Sanscrit vidya*; *Pracrit amac'c'a* (pronounce *amatsha*) *minister*, from the *Sanscrit amatya*, pp. 59, 60, 61. The zetacism does not occur in the *Modern Persian*, because it has been deprived for the most part of its terminations, which very frequently contain the consonantal *y*, the cause of the zetacism, and because, also, its

words have otherwise been broken up by the loss of letters and the arbitrary insertion of vowels. Of the *Armenian*, which has been disfigured in a like manner, Mr. Schleicher mentions one single instance of the zetacism, viz. : *mêg'*, (pronounce *madsh*), *middle*, Sanscr. *madhya*. Less disfigured is the *Ossetian* language, another member of the Iranian family, which continues at the present day in the Caucasus, in the midst of languages from a different origin, and of which three dialects are spoken. In the *Digorian* dialect *g* before *i* is changed into *gy*, i. e. the hard *g* followed by the consonantal *y*; in the *Tagaurian* it becomes *dy*. These changes form a scale, indicating the increasing influence of *i=ee* upon the guttural. The same thing takes place in *k* and *kh*, when followed by *i*, and also by *e*, in the beginning of words; still, the transition of *ky* and *ty* into *tsh* has not yet been proved in these particular instances. In the Digorian dialect *z*, *dz*, and *s*, before *i*, are changed into *z'*, *dz'*, and *s'* (with a weak aspiration, as in *azure*) etc.

Among the two principal branches of the *Celtic* family, the *Cymric* (*Breton*) is untouched by the zetacism. In the *Gaelic* branch, according to *Pictet*, the *Irish* idiom considerably softens *t* and *d* before the weak vowels, so that their sound may properly be explained by *ti* in *tien* and *di* in *dieu* (Fr.). This, Mr. Schleicher properly regards as the first effect of the vowels *e* and *i* on the preceding dental, so that here we have manifestly *tye*, *tyi* (with the consonantal *y*) instead of *te* and *ti*. In the *Erse* (*Highland Scotch*) *t* and *d* before *e* and *i* are pronounced like *c'* and *g'* (*tsh* and *dsh*). This influence is exerted by *e* and *i* not only on the preceding, but also on the immediately following consonant; *i* is always sounded after *d*. *Dh* before *e* and *i* is almost pronounced like the German *j*, and the English consonantal *y*; so also *gh* before *e* and *i* is pronounced like *y* in *young*.

In the *Lithuanian* language we only meet with the dental zetacism. When *ti* and *di* are followed by a vowel, thus when *i* is equivalent to a German *j* and English consonantal

y, they are changed into *ts* and *ds* (*cz* and *dz'*), and the letter *i* is no longer pronounced, e. g. *sēdziu* (pronounce *setsu*), together with *sēdmi*, *I sit*; *z'altis*, *the serpent*; *z'odis* *the word*, in the genitive have *z'alczio* (*z'altsho*), *of the serpent*, *z'odzio* (*zodsho*), *of the word*.

In the *Lettish* language, which partakes altogether of a more modern character, the zetacism seizes the dentals, gutturals, sibilants and liquids, e. g. *leek-u*, *I lay*, *leezi* (pronounce *la-tsee*) *thou layest*, *deg-t*, *to burn*, *degg-u*, *I burn*, *dedsi*, *thou burnest*. *T* is changed into *sh*, e. g. *Leiti-s a Lūhuanian*, *Leisha*, *of the Lithuanian*. *D* is changed into *zh* or soft *sh*, e. g. *breedi-s*, *the elk*, *bree-zha*, contracted of *breedya*, *of the elk*, etc.

The *Slavonic* languages, as *Mr. Schleicher* says, are the true homestead of this linguistic law. In order to demonstrate the laws of the zetacism in these languages he discusses the *Old-Slavonic* of the East, and the *Polish* of the West. In the *Old-Slavonic* there are two kinds of vowels, 1. *Solidæ a, e, y, o, u*, 2. *Liquidæ* or *affectæ*, *ya, ye, i (yi), (yo), yu*. *I* is instead of *yi* even in the *Polish*. The simple *i (y)*, which is called *Iery* does not affect the preceding consonants. All genuine Slavonic consonants are subject to the zetacism, except those which almost universally arose from the zetacism, viz.: *sz=sh*, *cz=tsh*, *szcz=shtsh*. The great number of sibilants in the Slavonic languages is entirely owing to changes wrought in the consonants by the consonantal *y* and *i*.

In the *Teutonic* family the zetacism manifests itself at a late period. In the *Gothic* it was entirely unknown. In the *Old-High German* the dental smooth, indeed, almost universally passed over into *z=ts*, while it was retained in the other dialects; still, this change runs parallel with that of the gutturals and the palatals in the Sanscrit, and is not owing to the succeeding *i* or *e*. In the *Old-Friesic* *k* is sometimes changed into *sz*, when followed by *e* and *i*, e. g. *szetel*, (*cacabus*), *szerke*, (*ecclesia*); *kk* and *gg*, which are frequently followed by a consonantal *y*, are changed into *sz (ts)* and *dz (ds)*. In

the *Old-English* we find *ch* instead of *k* before *ē, i, ē, i*; its pronunciation, however, is uncertain. In the *Modern English*, as is well known, the zetacism has affected many of the dentals, as well as of the gutturals, (pp. 78, 79). The *Icelandic*, by the insertion of *j*, i. e. *y*, into the old stems, shows the first traces of the zetacism; likewise the *Danish*, (p. 81). In the *Swedish* the initial guttural smooth, before *e, i, y, ā, ð, ē, i, y, æ, œ, jā, je, jo, ju*, loses its peculiar sound, and, according to *Botin*, sounds like *tj=t* with the consonantal *y*, and according to Prof. *Rask* like *tsh*. This pronunciation may be assumed as correct, at least with regard to that dialect of the Swedish language with which *Rask* was acquainted. *Sk* is pronounced like *sh* before the vowels related to *i*, e. g. *skynda* (pronounced *shynda*) *to hasten*; *sken* (*shen*), *appearance*. Before these same vowels *g* is pronounced like=*j* (consonantal *y*) p. 80. 81.

From the *Greek language* the palatal semi-vowel *y* (Engl. *y* in *year*) as well as the labial *v* (Ϝ) disappeared at an early time. The consonantal *y* was a) either entirely cast off as in ὅμμες, *you*, Sanscr. *yous'mat*; ἱσθής, *vestis*, Sanscr. *vas*; or b) it passed over into the hard breathing sound *h*, e. g. ὅμμεῖς, *you*, ἡπαρ, *jecur*; or c) it was replaced by the vowels *ι, ε, υ*, e. g. ἰόντι, Sanscr. *yant*, *going*, which is the crude form of the present participle, etc.

As a *medial*, 1, it is dropped in numberless cases, e. g. in the verbs in *άω, όω, έω*, instead of, *άγω, όγω, έγω*, which correspond to the Sanscrit verbs of the tenth class; in the verbal adjective of necessity terminating in *τέος*, which corresponds to the Sanscrit *tavya*, where two semi-vowels have been dropped; between a consonant and a following vowel οἰόντι instead of οἰσόντι (cfr. Ahrens de dial. Dor.); 2, it is changed into *ι* or *ε*, e. g. *άγιος*, Sanscr. *yag'ya*, *κενός*, Sanscr. *cûnya*; 3, it is transposed, e. g. *ώττειρα* for *ώττεργα*, etc. 4, it is assimilated by the preceding consonant, e. g. *χέβων, χέργων, χερίων, χερίων*.

Besides these changes to which the semi-vowel *y* was

subjected, it also coalesced with the dentals, gutturals, [and even sometimes with the labials] into ζ or σσ. As a medial, ζ or σσ is obtained 1, from δγ (δ with a consonantal γ) and τγ, when they are followed by a vowel, e. g. σχίδ-η, σχίδ-γω, σχίζ-ο*; κρατὺς (κρατερός, *strong*), Dor. [κρατίων, κρασίων, κράσων] κράσσων, later *Ionic* κρέσσων, *Attic* πρέσσων; βραδύς, βραδίων, βράδων, βράσσων, *slower*; καρδία, *Æol.* κάρζα, *heart*; ῥίζα, ῥίδγα, *root*. *Sancr.* vṛdh, to grow; παιδ-, παιδγω, παίζω; *Sancr.* had, Perf. κέχονα, χέδγω, χέζω; 2, from γγ, γγ and χγ, e. g. μέγ-γων, μεγίωι, μέζων, μείζων; κράγγω, κρᾶζω*; στίγγω, στίζω; (ήκνυς,) ήκιστα, ήκίωι, ήκγωι, ήσσων; βηχ, βήχγω, βήσσω, etc.; 3, [from βγ, πγ, e. g. λάβγο-μαι, λάζομαι; νίπγω, νίζω; πίπ-γω, πίσσω; ἐνέπω, ἔπος, ἐνίσσω, ὅσσε, ὅσσομαι, ὁπ[τ]ομαι; κοπ-, κόπγω, κόσσω, κόπτω.]

As an initial, ζ is obtained; 1, frequently from δι which, when followed by a vowel, is instead of δγ (δ with a consonantal γ). Thus ζά instead of διά, (which does not occur exclusively among the *Æolians*), ζά νυκτός; ζαβάλλειν for διαβάλλειν; Ζώννυξος for Διώνυσος; ζάπειδον for διάπειδον, Ζεύς for Δγεύς, Δώς, from the *Sancr.* dyoo; Lat *zeta* for δίαίτα; 2, from βγ (β with a consonantal γ). For according to Eustathius and Strabo the *Arcadians* (and, according to the latter, also the *Macedonians*), instead of an initial β, pronounced ζ, e. g. ἐπιζαρέω for ἐπιβαρέω; ζέρεδρον for βάρεδρον. Hesychius and the *Etymologicum magnum*, without specifying the dialects, mention ζέλλω [βέλος?] for βάλλω. We do not see any reason why instead of tracing some of these words to guttural roots of the *Sanscrit*, and not attempting to explain the rest, we should not rather admit in the Greek language, as well as in the other idioms, mentioned by Mr. Schleicher, a coalescing of the labial into the consonantal diphthong, by the addition of the semi-vowel γ. Instead of admitting a partial or dialectic assibilation of the labial, Mr. Schleicher rather takes recourse to guttural stems of the *Sanscrit*. Still, this weakening of the labial could not have taken place in

* See Bopp's explanation of this ending, "Vergl. Gramm." § 19.

the primitive times, when the old members of this chain of languages yet formed an unbroken whole, nor yet, while the Greek and Latin together formed the Graeco-Italic or Pelasgic idiom, but it must have happened after the separation of the former from the latter—for the Latin, after many centuries, had not yet manifested the least trace of assibilation—and, indeed, on Greek ground, after the labial had become fully developed, and shown its distinctive nature.

In the *Modern Greek*, according to Mr. *Schleicher*, pag. 59, and Prof. *Diez*, pag. 234, 235, the assibilation of *k* before *i* does not yet generally prevail; still, in some dialects it is even now pronounced as *c*=*tsh*.

In order to have a full view of the history of this linguistic phenomenon, we close our statement with Mr. *Schleicher*'s zetacism of the *Romance* languages, which not only assails the gutturals and dentals, but also the labials, as in the Thibetian and the Polish [and, as we suppose, to some degree in the Greek].

The guttural *c* before *i*, *y*, *e*, *ae*, *æ*, was partly changed into *z* (=ts, ds), e. g. Ital. *Zeppo*, *cippus*; Wal. *otzet*, *acetum*; *calza*, *calceus*; *atzē*, *acies*—the Spanish and Portuguese *z* is intermediate between the Italian and French—partly into the sound *tsh*, in the Italian *dolce*, *cielo*, and partly into *s* in French, e. g. *douce*, *douceur*.—*Qu* either remains unchanged, or else it passes over into the sound of *s* or *tsh*, e. g. Fr. *cuisine* (*coquina*), *cinque*; or finally it takes the sound of *k*, e. g. Fr. *question*.

J before all vowels, and *g* before *i* (*y*) and *e* either sound as *x*, as the Spanish, or as *dzh* in the Italian, the Provençal and the Walachian, or as *zh* in the French and Portuguese.

The dental *smooth* before the mute *i* or *e* (i. e. the consonantal *y*) in the Italian and Walachian is changed into *ts*; in the Spanish and Portuguese into *z*, *g*, where an indistinct *d* is still heard, (cfr. *Diez*, pag. 379). Thus in the Italian we find *tizzone*, *titio*; *pozzo*, *puteus*; in the Spanish *pozo*,

dureza; in the Portuguese *poço, presença*; in the Provençal *potz; pretz, pretium*. In the Italian the letter *i* frequently remains, e. g. *avarizia*, together with *avarezza*. In the French *t* is changed into *s* or *c*, as *injustice, justesse, saison*, or at least, it sounds as *s*, e. g. *nation, corruption*. In a few cases it becomes *gi* in the Italian, i. e. *ragione, condannazione, presentazione*. Sometimes it even becomes *z* (*tz*) in the beginning of words, e. g. Ital. *zio*, Walach. *tzigli, tegula*; also in the Italian *anzi, ante*, from *antie, antye*.

D, likewise, before *i* and *e*, when they are followed by another vowel, coalesces into *z* (=dz), and sometimes into *g*, =dzh, e. g. *radius, razzo; medius, mezzo; hodie, oggi*. In the Provençal and the Walachian it becomes *z*=soft or hard *s*.

The *labials*, even, are sometimes assailed by the zetacism, as in the Thibetan, Polish and Greek: *pi, pe, (=py)* e. g. *pipio, piccione; sepia*, Fr. *sèche; prope*, Fr. *proche; appropinquare*, Ital. *approcciare*, Fr. *approcher; by, bi, be*, e. g. *objectum*, Ital. *obbietto, oggetto; subjectum*, Ital. *subbietto, suggetto*, Fr. *sujet*, Provenc. *sojeit; debeo, deggio; rabies, rage; cambiare, cangiare*, Fr. *changer; tibia*, Fr. *tige; rubeus*, Ital. *roggio*, Fr. *rouge; vi, ve*, e. g. *pluvia, pioggia; serviens, sergente; cavea, cage; abbreviare, abbreger; diluvium, deluge; my, mi, mé: e. g. vindemia, vendange; simia, singe; commeatus, congé*.

In tracing the development of the zetacism in the various languages, every unbiased inquirer is irresistibly led to the conclusion, that we must claim for the Latin and Greek the same course of development, as in all other languages, and that any deviation from this general law must be regarded as an individual anomaly, as in the case of the Aeolians and Dorians who not only transposed ζ into σδ, but also ξ and ψ, as in σέινος, sken'os σέλιον, spel'ion, instead of ξέινος, ksen'os ξέλιος and ψέλιον, ψέλιον psel'ion. This transposition of ζ however, is erroneously regarded as more general than it really is, since, according to Ahrens, "*De dial. Aeol.*" pag.

47, 48, and "*De dial. Dor.*" p. 96, it only extends to the ζ of a dental origin (with the single exception of μέσδω for μέζω, μεῖζω). Mr. Schleicher says, pag. 43: "It is a peculiarity of the Doric dialect, whenever a σ follows a mute, to put it before it; e. g., σκίφος, σπέλιον skiph'os, spel'ion, instead of κσίφος ksiph'os, πσέλιον psel'ion. In these examples σκ and σπ, evidently hold the same relations to ξ and ψ (κσ and πσ) as σδ to ζ. Now, this last case of metathesis, as is well known, is very frequent, so that those few cases where an organical σδ has become ζ ('Αθήναζε, Θήβαζε, Δύραζε instead of 'Αθήναςδε, Θήβαςδε, Δύραςδε, and βύζην, βυζόν for βύσδην, βυσδόν, *confertim*,) are nothing else but metatheses (Dorisms). In these cases ζ was pronounced instead of σδ, as in so many other instances, in which ζ (δσ) was said by some, where they heard others say σδ. In the common estimation σδ and δσ (ζ) were equivalents, and the dialects declared themselves either in favor of one or of the other. All Greeks, who were not Dorians, regarded all compositions of σδ as Dorisms, in the place of which δσ (ζ) was to be spoken."—Mr. Schleicher continues, pag. 155, ff.: "As the grammarians were unable to explain genetically any other ζ than that which in a few cases had really come from σδ ('Αθήναζε, etc.), and as they had no idea whatever of the formation of the great majority of the other ζ, they adopted this explanation for the ζ in general, and made a rule of the exception, which is a favourite method followed by the grammarians of the old school. The fact that ζ sounded differently from σδ is proved by the grammarians, where they treat of the change of ζ into σ and δ; e. g. *Herodian* in the *Etymologicum Magnum*, 181, 44, says, ἀγνάσδημι . . . τροπή τοῦ ζ εἰς σ καὶ δ; *Dionysius of Halicarnass.* universally classes ζ with ψ and ξ, only he attributes to it a softer sound, inasmuch as it is not equivalent to σσ but to dz. The reason why in some places he puts σ before δ may be this, that he was thinking of such cases, as 'Αθήναζε, 'Αθήναςδε, by which he wished to indicate at the same time the apparent etymology of ζ. . . *Plato* would certainly not

have called ζ πνευματωδεις, (*Cratylus*, p. 427), nor would he have classed it with φ, ψ and σ, if it had been pronounced σδ. The sounds φ, ψ end in a breathing sound (*spirans*) and ζ is a pure breathing sound (*spirans*); thus they are all continuous and the breathing is clearly marked in them. But these attributes are all wanting in σδ, while they are distinctly found in ζ=dz. *Aristotle*, also, *Metaph.* XIV, 6, classes together ξ, ψ, ζ, as being homogeneous, συμφωνίαι. *Dionysius*, likewise does not mention the slightest difference between them in the following passage (p. 168): τρία δὲ τὰ λοιπὰ ἡμίφωνα μικτὸν λαμβάνει τὸν ψόφον, ἐξ ἐνὸς μὲν τῶν ἡμιφώνων τοῦ σ, τριῶν δὲ ἁφώνων τοῦ τε κ καὶ τοῦ δ καὶ τοῦ π; and in the passage immediately following, where it is his object to point out the distinctive feature of ζ, he only says, that ζ, on account of its being *medial*, i. e. belonging to the middle (ψιλῶν ὀττων ἀμφοτέρων, viz. ψ and ξ), sounded more softly. If there had existed such a great difference between ζ on the one hand, and ψ and ξ on the other, as is supposed by those, who pronounce ζ as σδ, *Dionysius* would have surely mentioned it here, as he above others is distinguished by his acute observation. . . . How, indeed, could *Dionysius* have described ψ and ξ as being ὁμογενεῖς to ζ, if this had been pronounced σδ and not dz?"

From these extracts we see that Mr. Schleicher vindicates its true sound to the letter ζ. Still, he admits, that there are unequivocal testimonies of later Greeks in favor of its Aeolic and Doric sound σδ. A like difference, also, appears in the Roman testimonies, adduced by *Schneider* in his *Compendious Latin Grammar* ("Ausführliche Grammatik," etc. Vol. I, pp. 375-388). While the older Greek testimonies are more in favor of the double consonant δς, the latter incline more to the opposite side. This, also, is perfectly natural. For, in olden times, the double sound of the letter ζ was in use among those who spake the Attic, or the common Greek dialect. This, afterwards, disappeared more and more, until, at last, it was reduced to the simple sound of the middle aspirate, viz.,

z in English; while the lower classes of the Aeolic and Doric population, as is the case in all languages, (especially in the German,) clung fast to their old forms and sounds, in which, in respect to the pronunciation $\sigma\delta$, the learned were confirmed by some Attic forms, which have been mentioned above. The same was the case among the Romans. They were in constant intercourse with the Doric population of Lower Italy and the opposite Greek coast, as well as with those in Sicily, and on this account they imagined the archaic double sound of $\sigma\delta$ (which still continued in those regions, while in the common Greek dialect it sounded like a simple z, as in French or English), to be the original sound, which they extended, also, to the Ionian and Attic dialects. By doing so they made the same mistake, as for instance he would make, who, from the fact that in one part of Germany *Sch*=Eng. *sh*, is separated into the sounds *s* and χ =*kh*, would conclude that, also, in the rest of Germany they say "gewas-chene Kamas-chen," instead of "gewash-ene Kamash-en." The modern grammarians, to whom all Greek sounds are mere dead sounds, either follow the later authorities, or else they credit the earlier dates which are more in agreement with the dictates of a sound reason, and thus they are either in favor of $\delta\sigma$ or $\sigma\delta$, or else they are undecided, or adopt the post-classical and modern Greek pronunciation, i. e. the sound of French and English z. Among *thirty-six* Greek and Latin grammarians, whose works we have on hand, *eighteen* are in favor of $\delta\sigma$, viz., *Zumpt, Schneider, Johannsen, Key, McClintock, Bullion, Donaldson, Billroth, Alschefski, Vanicek* in their Latin Grammars; *Kühner, Mehlhorn, Baeumlein, Curtius* in their Greek; and, moreover, the Messrs. *Bopp, Diez, Schleicher, Corssen*; in favor of $\sigma\delta$ are *Ahrens, Krüger, Thiersch, Rost, Grotefend, Ramshorn, Madvig*; the following gentlemen are undecided, viz., *Weissenborn, Krütz, Schulz, Andrew and Stoddard, Meiring, Frei, Crosby, Hartung*. Dr. *Buttmann* declares, page 17, of his *Compendious Grammar*, ("Ausführliche Grammatik") that ζ is

not to be pronounced like the German *z*, viz., *ts*, but that it ought to be sounded more like *ds*, or rather like *dz*, which *z* corresponds to the French or English letter.

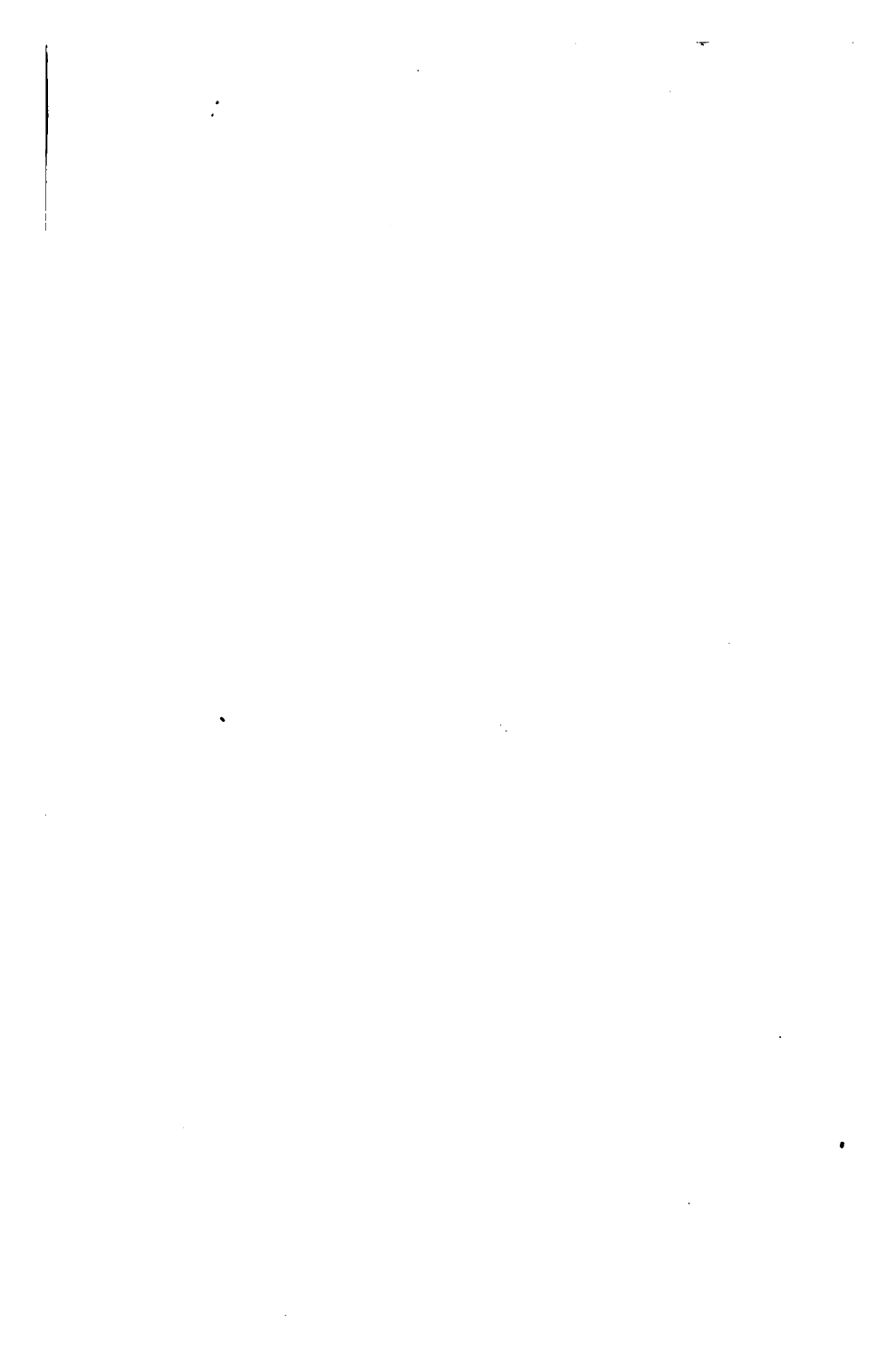
This double letter, he holds, very soon passed over into the simple French or English *z*; still, he says, that we ought not to give up its compound sound which is proved by prosody, e. g. in *τράπεζα*, *ἀρμόζω*. He concludes the subject in the following words: "There are some testimonies and traces from which it appears, that this double sound was properly *sd* (French and English *zd*); still, there must have been some difference between this pronunciation, and the peculiarity of the Dorians pronouncing *sd* instead of *ds*. The best thing we can do for the present, is, to leave this matter to *investigation*, and to hold fast in usage to the customary pronunciation *ds*, which, certainly, has also the claim of antiquity." To *investigation*, also, it was reserved to find the clue to this labyrinth of contradictory views and testimonies of antiquity in which the old school gropes about, and, by comparing all languages to which we have access, to reach a higher point of view in the several domains of language, from which we are enabled to establish those laws of analogy by which we can with certainty fathom antehistorical formations in language. It is a fact, as we have seen above, that the dentals, gutturals, and in some measure, also, the labials, which originally were pure, unmixed creations of the several articulating stations, in the course of time became weakened, and, in their weakened state, endeavored to propthemselves, either by solidifying the vowels *i* and *e* (when preceding other vowels,) and changing them into the cognate semi-vowel *y* (*y* in *year*), or else by inserting this straightway into the stem. Some languages did not go any further, but in others, although *y* did not exactly assibilate the preceding gutturals (or labials,) it still decomposed them to such a degree, as to change them into dentals which are more nearly related to the sibilants. The next step is that, where the dental is weakened into its cognate sibilant, but where the semi-vowel is still heard; in the

last step, finally, it is thoroughly absorbed by the dental sibilant. Thus, in the *Danish*, *Icelandic*, and *Finnish*, the semi-vowel *y* is first introduced into stems; in the *Swedish* and *Magyar* it has already decomposed the guttural into a dental, and, according to Prof. Rask (see above), it is even now partially assibilated. In the *English* language we are still averse to the assibilation of *i* and *e* before the dental middle *d*, e. g. *obedient*, *expedient*, *hideous*, *dewy*, but by converting both *i* and *e* into a *y*, we have already taken the first step towards their assibilation, which, even, is already accomplished in *soldier*, and to some degree in *educate*, etc. In the dental and guttural smooths, viz. : *t* and *c*, we admit it in all its degrees. *T* is merely propped as yet by the interposition of *y* (*i*), e. g. in *nature*, *stature*, which, according to some authorities, are still to be pronounced *nā-tyur*, *stā-tyur*, while, by others, they are already assibilated; in *piteous*, *courteous*, also, *t* is still protected by *e* changed into *y*, in *righteous* it is already assibilated, while in *propitious* the *t* preceding the sibilant is even cast off. The same case we notice in the assibilated *c*, which universally casts off the mute preceding the sibilant, e. g. *associate*, *gracious*, *speciul*, while the guttural middle still retains it, e. g. *contagious*, *courageous*.—The fact of the first degree of the decomposition of the guttural smooth is demonstrated in the Latin by the interchange of the guttural and the dental, e. g. *patri-cius* and *patr-itius*, *concio* and *contio*, *nuntius* and *nunci-us*, etc. The time of their assibilation cannot be determined, because it was not expressed in writing by *z*. It can scarcely be doubted, however, that the assibilation was avoided by the educated, as is even done in our language, and that it was not expressed by them in writing, even after it had been for a long time established in the popular pronunciation. It was finally introduced into the written language in the Italian. It was different in the Greek, where a peculiar character was procured for the representation of the sound, obtained by the decomposition of the mutes.

We willingly agree with Mr. Schleicher, who on account of the analogy with the other languages assumes the transition sounds *dsh* and *tsh* also for the Greek and Latin. This decomposition of the mutes in the Greek into *dsh* or *tsh*, however, must certainly date back to ante-historical times, and in the Latin, where this process of weakening began in the historical times, the weakening into *dsh* or *tsh* cannot be established at all; hence, in the Greek we have with a certainty only the combination *dz*, and in the Latin *dz* and *ts*. By admitting, in the Greek, this ante-historical sound *dzh*, we obtain that particular sound about which Dr. Buttmann, p. 17, Obs. 7, speaks in general terms, and which Mr. Sophocles apparently means in his Grammar, p. 16 (1857) where he says, "*Had z been sounded like ΣΔ, Dionysius and Quintilian could not have admired its beautiful sound 'ἡσυχῇ τῷ πνεύματι δαδύνεται*", 'it is gently aspirated', and 'jucundissima littera', and the Roman grammarians would not have asserted, that the Latins had no sound corresponding to it. It is evident, therefore, that *z* is not a double consonant in the usual acceptation of the term 'double'". Mr. Key, also, in his "Alphabet" (1849) arrives at a similar result, where he says: "We strongly suspect, that the genuine sound of the Greek *z* in early times was not, as it is sometimes [we may say universally] stated that of *sd* or *ds*, for then it would have been a superfluous letter, and would scarcely have appeared so early in the alphabet. We would rather believe, that the sound was similar to that of the English *j*." As regards the superfluousness of the letter ζ, we agree with Mr. Key, but then the same applies to the other double consonants, viz: ξ and ψ, and still they are found in the Greek alphabet at a very early time. The reason why the letter ζ was introduced at such an early time, may be owing to its peculiar function of representing a sound which was produced by the decomposition of the mutes. In case we even assume the existence of an original *dsh* (*dzh*) in the ante-historical ages, it, still, cannot be admitted that this sound was yet heard at

the times of Dionysius and Quintilian; inasmuch, as the sound of *sh* had disappeared from the Greek even before the beginning of the historical ages, and was still wanting in it up to the present time, where it is recorded as a matter of curiosity, that this sound is now being heard in Athens for the first time, preceded by a hard dental mute, where, for instance, *εσσινος* is said to be now pronounced like *etshee-nos*. The reason why the beauty of this sound was admired by Dionysius and Quintilian, supposing it even to have consisted of *dz*, was probably this, that while in the other compound letters, viz: ξ and ψ the first members were smooths, in ζ it was a middle, which, in the course of time was reduced more and more, until it was finally scarcely audible, so that it may be compared with the Spanish and Portuguese *c* and *z*. Dr. *Buttmann's* assumption, that the Aeolic and Doric combination *σδ* was prior to the Ionian *dz*, lacks all positive proofs. 1. Because it is impossible for *sd* to be developed into *ds*; 2. because the historical proofs, as we have seen above, do not compel us to make this assumption, but, on the contrary, are more favorable to the other explanation; 3. inasmuch as all the investigations, instituted into the nature of the sound obtained by the decomposition of the mutes, (as has been shown above) prove, that it consists of a sibilant, preceded by the dental mute, we must look upon the combination *sd* as a dialectic anomaly and excrescence, which is comparatively old, and yet owing to a later formation.







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